

EXHIBIT A

U.S. SERIAL NO.: 10/521,619

ASSIGNMENT OF PATENTS

This Assignment of Patents (this "Assignment") is effective as of the Initial Closing Date (as defined in the Asset Purchase Agreement (the "Asset Purchase Agreement"), dated as of October 10, 2003, by and among ASML Holding N.V., a Dutch company ("Parent"), ASML U.S., Inc., a Delaware corporation and a wholly-owned subsidiary of Parent ("Seller U.S."), and the other affiliates of Seller U.S. party thereto (together with all of the foregoing parties, each a "Seller" and collectively the "Sellers"), on the one hand, and Thermal Acquisition Corp., a Delaware corporation ("Buyer"). Capitalized terms used herein but not defined shall have the meanings ascribed to such terms in the Asset Purchase Agreement.

WHEREAS, upon the terms and subject to the conditions in the Asset Purchase Agreement, Sellers have agreed to assign and transfer to Buyer, among other things, certain Patents (as defined below);

WHEREAS, in order to further effect the assignment and transfer of such Patents, Buyer has requested that Seller U.S. execute and deliver to Buyer this Assignment;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged:

1. Sellers agree to and hereby do assign, sell, transfer, grant and convey to Buyer, its successors and assigns, all of Sellers' worldwide right, title and interest in and to all Patents listed on schedule 3.18(a)(i) of the Disclosure Schedule and all causes of action, demands, judgments, claims, or other similar rights of Sellers relating primarily to such Patents.

"Patents" shall mean all U.S. and foreign patents and applications therefor and all reissues, divisions, renewals, extensions, provisionals, continuations and continuations-in-part thereof.

2. Sellers authorize and request the United States Patent and Trademark Office and head of any foreign patent office to issue all patent registrations which may issue on any applications for any Patents to Buyer, its successors and assigns, in accordance with this Assignment.

3. Promptly upon the request of Buyer, Sellers shall execute such documents and perform such actions as may be necessary to perfect the assignment of rights contained in this Assignment.

4. Nothing herein shall affect, or be deemed to affect, the representations, warranties, covenants, and indemnities contained in the Asset Purchase Agreement.

5. This Assignment may be executed in one or more counterparts and signature may be delivered by facsimile, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

ASML U.S., Inc.

By:

C. Douglas Marsh

Name: C. Douglas Marsh

Title: Vice President Business Integration
& U.S. Institutional Relations

Thermal Acquisition Corp., a Delaware Corporation

By:

Name: Jerauld Cutini

Title: President and Chief Executive Officer

IN WITNESS WHEREOF, Seller U.S. has caused this instrument to be executed by its duly authorized corporate officer as of the Closing Date.

ASML U.S., Inc.

By:

Name: C. Douglas Marsh
Title: Vice President Business Integration
& U.S. Institutional Relations

ACKNOWLEDGED AND AGREED:

Thermal Acquisition Corp., a Delaware Corporation

By:



Name: Jerauld Cutini
Title: President and Chief Executive Officer

DISCLOSURE SCHEDULES

SCHEDULE 3.18(a)(I)

The following Patents:

Attachment 1 to

Disclosure Schedule 3.18(a)(1)

| Reference No. | | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|------|-----------------|---|----------------------------|------------------------------------|----------------------|
| A | 16178 | 6 | AJT | LOW TEMPERATURE CHEMICAL VAPOR DEPOSITION OF SILICON DIOXIDE FILMS | 07/068,727 06/29/87 | 4,845,054 07/04/89 | |
| FA | 16178 | 6-JP | AJT | LOW TEMPERATURE CHEMICAL VAPOR DEPOSITION OF SILICON DIOXIDE FILMS | 61-137340 06/14/86 | 2134184 12/26/97 | Japan |
| A | 16178 | 7 | AJT | CVD REACTOR AND GAS INJECTION SYSTEM | 07/044,326 10/27/87 | 4,834,022 05/30/89 | |
| FA | 16178 | 7-JP | AJT | CVD REACTOR AND GAS INJECTION SYSTEM | 61-165449 07/14/86 | 2076448 08/09/96 | Japan |
| A | 16178 | 8 | AJT | FLUIDIZED BED HEATER FOR SEMICONDUCTOR PROCESSING | 707262 03/01/85 | 4,673,799 06/16/87 | |
| A | 40356 | | AJT | RAPID INFRARED CURING OF PHENOL PHENOLIC, EPOXY AND OTHER RESINS/Alley, Knut, et al. | Closed | | |
| A | 44048 | | AJT | ATMOSPHERIC PRESSURE CHEMICAL VAPOR DEPOSITION APPARATUS AND METHOD/ Bartholomew | 07/128,806 12/04/87 | 4,834,020 05/30/89 | |
| FA | 44048 | JP | AJT | ATMOSPHERIC PRESSURE CHEMICAL VAPOR DEPOSITION APPARATUS AND METHOD/ Bartholomew | 63-307653 12/05/88 | 2930960 05/21/99 | Japan |
| FA | 44048 | KR | AJT | ATMOSPHERIC PRESSURE CHEMICAL VAPOR DEPOSITION APPARATUS AND METHOD/ Bartholomew | Closed | | South Korea |
| A | 44153 | | AJT | INDUSTRIAL ROBOT FOR USE IN CLEAN ROOM/ Stevens | 07/089,591 08/26/87 | 4,787,813, 11/29/88 Abandoned | Expired |
| A | 44521 | | AJT | METHOD FOR IMPROVING STEP COVERAGE OF DIELECTRIC IN VLSI CIRCUITS/Shamshoian | 06/907,503 09/15/86 | Abandoned | |
| A | 44521 | 1 | AJT | METHOD FOR IMPROVING THE STEP COVERAGE OF DIELECTRIC IN VLSI CIRCUITS/ Shamshoian | 07/214,909 06/29/88 | 4,891,247 01/02/90 Abandoned | |

I-71935/MSS (463055-828)
1059128

| Reference No. | | Title/Inventors | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|-----------------|----------------------------|--|--|
| FA | 44521 | 1-JP | AJT | BOROSILICATE GLASS FILMS FOR MULTILEVEL METALLIZATION STRUCTURES IN SEMICONDUCTOR DEVICES AND METHOD OF IMPROVING THE STEP COVERAGE OF DIELECTRIC IN VLSI CIRCUITS | Japan |
| FE | 44521 | 1-EP | AJT | Abandoned | |
| A | 47444 | | AJT MSS | Closed | Europe |
| FA | 47444 | DE | AJT MSS | 07/238,826 08/31/88 | Abandoned in favor of 07/798,829 (A-47444-1) |
| FA | 47444 | KR | AJT MSS | P3928765.3 08/30/89 | Abandoned |
| FA | 47444 | JP | AJT MSS | 12472/89 08/31/89 | Abandoned |
| FA | 47444 | GB | AJT MSS | 01-226366 08/31/89 | Abandoned |
| FE | 47444 | EP | AJT MSS | 8919291.8 08/24/89 | 222416/ 03/03/93 Abandoned |
| FP | 47444 | PC | AJT MSS | Closed | Europe |
| A | 47444 | 1 | AJT MSS | Closed | PCT |
| A | 47444 | 2 | AJT MSS | 07/798,829 11/22/91 | Abandoned in favor of 07/991,500 (A-47444-2) |
| A | 47444 | 3 | AJT MSS | 07/991,500 12/17/92 | Abandoned in favor of 08/329,772 (A-47444-3) |
| A | 52244 | | AJT MSS | 08/329,772 10/27/94 | Abandoned per client ltr 09/14/98 |
| A | 52353 | | AJT WSG | 07/570,122 08/17/90 | 5,088,773 02/18/92 |
| A | 52354 | | AJT | 07/542,243 06/21/90 | 5,136,975 08/11/92 |
| | | | | 07/513,807 | 5,113,789 |

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| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|-----------------|-----|---|---------------------------|----------------------|
| FA | 52354 | KR | WSG | SELF CLEANING FLOW CONTROL ORIFICE/Kamian | 04/24/90 | |
| FA | 52354 | JP | AJT | 14708/90 | 188614 | South Korea |
| FA | 52354 | TW | WSG | 09/18/90 | 01/13/99 | |
| FA | 52354 | DE | AJT | 2-216935 | 2973490 | Japan |
| FA | 52354 | DE | WSG | 08/17/90 | 09/03/99 | |
| FB | 52354 | FR | AJT | 79106834 | 51810 | Taiwan |
| FB | 52354 | FR | WSG | 08/15/90 | 02/14/92 | |
| FB | 52354 | ES | AJT | 90307398.9 | 69017008 | Germany |
| FB | 52354 | FR | WSG | 07/06/90 | 02/15/95 | |
| FB | 52354 | FR | AJT | 90307398.9 | 453679 | Spain |
| FB | 52354 | FR | WSG | 07/06/90 | Abandoned | |
| FB | 52354 | GB | AJT | 90307398.9 | 453679 | France |
| FB | 52354 | GB | WSG | 07/06/90 | 02/15/95 | |
| FB | 52354 | GR | AJT | 90307398.9 | 453679 | United Kingdom |
| FB | 52354 | GR | WSG | 07/06/90 | 02/15/95 | |
| FB | 52354 | IT | AJT | 90307398.9 | 453679 | Greece |
| FB | 52354 | IT | WSG | 07/06/90 | Abandoned | |
| FB | 52354 | BE | AJT | 90307398.9 | 453679 | Italy |
| FB | 52354 | BE | WSG | 07/06/90 | 02/15/95 | |
| FB | 52354 | CH | AJT | 90307398.9 | 453679 | Belgium |
| FB | 52354 | CH | WSG | 07/06/90 | 02/15/95 | |
| FB | 52354 | EP | AJT | 90307398.9 | 453679 | Switzerland |
| FB | 52354 | EP | WSG | 07/06/90 | 02/15/95 | |
| FB | 52354 | LU | AJT | Abandoned 5/24/02 | 453679 | Europe |
| FB | 52354 | LU | WSG | 90307398.9 | 02/15/95 | |
| FB | 52354 | NL | AJT | 07/06/90 | 453679 | Luxembourg |
| FB | 52354 | NL | WSG | 90307398.9 | 02/15/95 | |
| FB | 52354 | SE | AJT | Abandoned | 453679 | Netherlands |
| FB | 52354 | SE | WSG | 90307398.9 | 02/15/95 | |
| FB | 52354 | SE | WSG | 07/06/90 | 453679 | Sweden |

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| Reference No. | | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|----|-----------------|--|----------------------------|--|----------------------|
| FB | 52354 | DK | AJT WSG | SELF CLEANING FLOW CONTROL ORIFICE/Karnian | 90307398.9 07/06/90 | Abandoned 453679 02/15/95 Abandoned | Denmark |
| FE | 52354 | AT | AJT | SELF CLEANING FLOW CONTROL ORIFICE/Karnian | 90307398.9 07/06/90 | 453679 02/15/95 Abandoned | Austria |
| A | 53835 | | AJT JEM | U-SHAPED HEATER LINES/Walker | 07/601.261 10/22/90 | Abandoned 08/19/92 | |
| FA | 53835 | KR | AJT | U-SHAPED HEATER LINES/Walker | 18391/91 10/22/91 | Abandoned 08/19/92 | South Korea |
| FA | 53835 | JP | AJT | U-SHAPED HEATER LINES/Walker | 3-274072 10/22/91 | Abandoned 08/19/92 | Japan |
| FB | 53835 | EP | AJT | HEATED FLUID SUPPLY LINE/Walker | 91309735.8 10/22/91 | Abandoned | Europe |
| A | 53836 | | AJT | LIQUID SOURCE BUBBLER/Richie | 07/601.270 10/22/90 | 5,078,972 01/07/92 | |
| FA | 53836 | JP | AJT | LIQUID SOURCE BUBBLER/Richie | 3-274069 10/22/91 | 1929857 05/12/95 | Japan |
| FA | 53836 | KR | AJT MSS | LIQUID SOURCE BUBBLER/Richie | 18392/91 10/22/91 | 191851 01/27/99 | South Korea |
| FE | 53836 | EP | AJT | LIQUID SOURCE BUBBLER/Richie | 91309736.6 10/22/91 | Abandoned | Europe |
| A | 53837 | | AJT | X-RAY TUBE INCLUDING FLUID X-RAY SOURCE/Gmalencki | Closed | | |
| A | 53859 | | AJT | LIQUID LEVEL SENSOR ASSEMBLY/Goodrich | 07/601.408 10/23/90 | 5,029,471 07/09/91 | |
| FA | 53859 | JP | AJT | LIQUID LEVEL SENSOR ASSEMBLY/Goodrich | 3-275317 10/23/91 | 1903072 02/08/95 | Japan |
| FA | 53859 | KR | AJT MSS | LIQUID LEVEL SENSOR ASSEMBLY/Goodrich | 18633-91 10/23/91 | 216658 06/01/99 | South Korea |
| FE | 53859 | EP | AJT | LIQUID LEVEL SENSOR ASSEMBLY/Goodrich | 91309743.2 10/22/91 | Abandoned | Europe |

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| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|---|-----|----------------------------|---------------------------|----------------------|
| A | 53860 | | AJT | | | |
| A | 53861 | VAPOR DELIVERY SYSTEM | AJT | Closed | | |
| A | 56598 | CHEMICAL REFILL SYSTEM | AJT | Closed | | |
| | | HEATER FOR PROCESSING GASES/Collins | | | | |
| FA | 56598 | | AJT | 07/971,490 11/04/92 | 5,377,300 12/27/94 | |
| FA | 56598 | GAS HEATER FOR PROCESSING GASES/Collins | | 6-511396 11/03/93 | Abandoned | Japan |
| FE | 56598 | GAS HEATER FOR PROCESSING GASES/Collins | AJT | 701790/95 11/03/93 | 163256 09/04/98 | South Korea |
| FE | 56598 | GAS HEATER FOR PROCESSING GASES/Collins | AJT | 94900500.3 11/03/93 | 0666972 01/07/99 | Europe |
| FE | 56598 | GAS HEATER FOR PROCESSING GASES/Collins | AJT | 98114622.0 12/22/98 | 1014206B 06/16/00 | Hong Kong |
| FE | 56598 | GAS HEATER FOR PROCESSING GASES/Collins | AJT | Abandoned | Abandoned | |
| FE | 56598 | GAS HEATER FOR PROCESSING GASES/Collins | AJT | 94900500.3 11/03/93 | P69322975 01/07/99 | Germany |
| FE | 56598 | GAS HEATER FOR PROCESSING GASES/Collins | AJT | 94900500.3 11/03/93 | 0666972 01/07/99 | France |
| FE | 56598 | GAS HEATER FOR PROCESSING GASES/Collins | AJT | 94900500.3 11/03/93 | 0666972 01/07/99 | Great Britain |
| FP | 56598 | GAS HEATER FOR PROCESSING GASES/Collins | AJT | 94900500.3 11/03/93 | 0666972 01/07/99 | Italy |
| A | 57727 | GAS HEATER FOR PROCESSING GASES/Collins | AJT | PCT/US93/10532 11/03/93 | Closed | PCT |
| A | 57728 | BPFG STABILITY ENHANCING CAP LAYER/ Engdahl | AJT | Closed | | |
| A | 58019 | OZONE PRETREATMENT FOR IMPROVED VIA RESISTANCE/Curtis | AJT | Closed | | |
| FP | 58019 | CHEMICAL VAPOR DEPOSITION OF SILICON DIOXIDE USING HEXAMETHYLDISILAZANE/Krusell | AJT | 08/071,516 06/03/93 | 5,304,398 04/19/94 | |
| | | CHEMICAL VAPOR DEPOSITION OF SILICON DIOXIDE FROM HEXAMETHYLDISILAZANE AND OZONE/OXYGEN/Krusell | AJT | | Abandoned | PCT |

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| Reference No. | | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|----|-----------------|--|--|--|----------------------|
| A | 59071 | | AJT | A THIN FILM SEMICONDUCTOR DEVICE AND METHOD/Harada | 08/191,091 02/03/94 | Abandoned | |
| FP | 59071 | PC | AJT | A THIN FILM SEMICONDUCTOR DEVICE AND METHOD/Harada | PCT/US94/01352 02/04/94 | Abandoned | PCT |
| A | 59072 | | AJT | METHOD OF MANUFACTURING A GLASS SUBSTRATE FOR A THIN FILM/Harada | 08/191,093 02/03/94 | Abandoned in favor of FWC 08/542,279 (A-59072-1) | |
| FP | 59072 | PC | AJT | METHOD OF MANUFACTURING A GLASS SUBSTRATE FOR A THIN FILM/Harada | PCT/US94/01278 02/04/94 | Abandoned | PCT |
| A | 59072 | 1 | AJT MSS | METHOD OF MANUFACTURING A GLASS SUBSTRATE FOR A THIN FILM/Harada | 08/542,279 10/12/95 | Abandoned | |
| A | 59073 | | AJT MSS | METHOD OF MANUFACTURING SIDE WALLS AND SEMICONDUCTOR DEVICE HAVING SIDE WALLS/ Harada, Hattori | 08/237,691 05/04/94 | Abandoned in favor of FWC 08/512,346 (A-59073-1) | |
| FP | 59073 | PC | AJT MSS | METHOD OF MANUFACTURING SIDE WALLS AND SEMICONDUCTOR WITH SIDE WALLS/Harada, Hattori | PCT/US94/05315 05/13/94 | Abandoned | PCT |
| A | 59073 | 1 | AJT MSS | METHOD OF MANUFACTURING SIDE WALLS AND SEMICONDUCTOR DEVICE HAVING SIDE WALLS/ Harada, Hattori | 08/512,346/ 08/08/95 FWC of 08/237,691 Filed 05/04/94 | Abandon | |
| A | 59425 | | AJT | TRIETHOXYLANE (TRIES) AS A PRECURSOR FOR THE DEPOSITION OF SiO ₂ /Schmidt | Closed | | |
| A | 59471 | | AJT MSS | SINGLE BODY INJECTOR AND METHOD FOR DELIVERING GASES TO A SURFACE/Dedomney | 08/276,815 07/18/94 | Abandoned in favor of FWC 08/621,772 (A-59471-1) | |
| FA | 59471 | JP | AJT MSS | SINGLE BODY INJECTOR FOR DELIVERING GASES TO A SURFACE/Dedomney | 7-181702. 07/18/95 | 2790437 06/12/98 | Japan |
| FA | 59471 | KR | AJT MSS | SINGLE BODY INJECTOR FOR DELIVERING GASES TO A SURFACE/Dedomney | 20958/95 07/18/95 | 190355 01/20/99 | South Korea |
| FA | 59471 | TW | AJT MSS | SINGLE BODY INJECTOR FOR DELIVERING GASES TO A SURFACE/Dedomney | 84100288 01/13/95 | 106107 12/29/99 | Taiwan |
| FB | 59471 | DE | AJT MSS | SINGLE BODY INJECTOR FOR DELIVERING GASES TO A SURFACE/Dedomney | 95304783.4 07/10/95 | P69513104.4 11/03/99 | Germany |

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| Reference No. | | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|------|--------------------|--|--|--|----------------------|
| FE | 59471 | EP | AJT. MSS | SINGLE BODY INJECTOR FOR DELIVERING GASES TO A SURFACE/Dedmontney | 95304783.4 07/10/95 | 0697376 11/03/99 | Europe |
| FE | 59471 | FR | AJT. MSS | SINGLE BODY INJECTOR FOR DELIVERING GASES TO A SURFACE/Dedmontney | 95304783.4 07/10/95 | 0697376 11/03/99 | France |
| FE | 59471 | GB | AJT. MSS | SINGLE BODY INJECTOR FOR DELIVERING GASES TO A SURFACE/Dedmontney | 95304783.4 07/10/95 | 0697376 11/03/99 | Great Britain |
| FE | 59471 | HK | AJT. MSS | SINGLE BODY INJECTOR | 9811870.5 11/09/98 | 1011010B 06/16/00 | Hong Kong |
| FE | 59471 | IT | AJT. MSS | SINGLE BODY INJECTOR FOR DELIVERING GASES TO A SURFACE/Dedmontney | 95304783.4 07/10/95 | Abandoned | |
| FE | 59471 | NL | AJT. MSS | SINGLE BODY INJECTOR FOR DELIVERING GASES TO A SURFACE/Dedmontney | 95304783.4 07/10/95 | 0697376 11/03/99 | Italy |
| A | 59471 | 1 | AJT. MSS | SINGLE BODY INJECTOR AND METHOD FOR DELIVERING GASES TO A SURFACE/Dedmontney, Gratenski, Miller | 08/621,772 03/22/96 FWC of 08/276,815 Filed 07/18/94 | 0697376 11/03/99 5,683,516 11/04/97 | Netherlands |
| A | 59471 | 2 | AJT. MSS | METHOD OF MANUFACTURING AN INJECTOR FOR CHEMICAL VAPOR DEPOSITION PROCESSING/Dedmontney, Gratenski, Miller | 08/869,085 06/04/97 Div. of 08/276,815 Filed 07/18/94 | 5,935,647 08/10/99 | |
| A | 59471 | 3 | AJT. MSS | SINGLE BODY INJECTOR FOR DELIVERING GASES TO A SURFACE/Miller, Dobkin | 08/892,469 07/14/97 CIP of 08/621,772; which is an FWC of 08/276,815 | 6,022,414 02/08/00 | |
| EA | 59471 | 3-TW | AJT. MSS | SINGLE BODY INJECTOR FOR DELIVERING GASES TO A SURFACE/Miller, Dobkin | 87111447 07/14/98 | 124167 04/24/01 | Taiwan |
| A | 59471 | 4 | AJT. MSS SMF | SINGLE BODY INJECTOR AND DEPOSITION CHAMBER/Miller, Dobkin | 09/113,823 07/10/98 CIP of 08/892,469; which is a CIP of 08/621,772; which is an FWC of | 6,200,389 03/13/01 | |

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1059128

| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|-----------------|-------------------|---|---|----------------------|
| FP | 59471 | 4-PC | AJT MSS | 08/276,815 | | |
| FA | 59471 | 4-CN | AJT MSS | PCT/US98/14393 07/10/98 | Closed | PCT |
| FA | 59471 | 4-HK | AJT MSS | 98807203.3 07/10/98 | | China |
| FA | 59471 | 4-JP | AJT MSS | 00108287.5 12/21/00 | | |
| FA | 59471 | 4-KR | AJT MSS | 2000-503260 07/10/98 | | Japan |
| FA | 59471 | 4-SG | AJT MSS | 2000-7000430 07/10/98 | 355058 09/29/02 | South Korea |
| FB | 59471 | 4-EP | AJT MSS | 9906104-6 07/10/98 | 69697 03/04/02 | Singapore |
| A | 59471 | 5 | AJT MSS SMF | 98933329.9 07/10/98 | | Europe |
| A | 60164 | | AJT MSS | 09/757,542 01/09/01 | 6,521,048 02/18/03 | |
| FA | 60164 | KR | AJT MSS | Divisional of 09/113,823 07/10/98 | | |
| FA | 60164 | JP | AJT MSS | 08/447,809 05/23/95 | 5,668,063 09/16/97 | South Korea |
| FB | 60164 | EP | AJT MSS | 708269/97 05/06/96 | | Japan |
| FP | 60164 | PC | AJT MSS | 8-535689 05/06/96 | Abandoned | Europe |
| A | 62201 | | AJT MSS | 96914585.3 05/06/96 | Abandoned | |
| A | 62732 | | AJT MSS | PCT/US96/06375 05/06/96 | Closed | PCT |
| | | | | 08/704,227 08/27/96 | 5,786,278 07/28/98 | |
| | | | | 08/800,106 | Abandoned in favor of FWC 08/976,928 | |

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| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|-----------------|------------|---|--|----------------------|
| A | 62732 | 1 | JEM | 02/13/97 | (A-62732-1) | |
| A | 62732 | 2 | AJT JEM | 08/976,928 11/24/97 | 5,944,900 08/31/99 | |
| A | 62786 | | AJT MSS | Closed | | |
| A | 62786 | 1 | AJT MSS | 08/573,318 12/15/95 | Abandoned in favor of 08/599,092 (A-62786-1) | |
| FA | 62786 | 1-CN | AJT MSS | 08/599,092 02/07/96 CTP of 08/573,318 Filed 12/15/95 | Abandoned | |
| FA | 62786 | 1-IP | AJT MSS | 96198872.X 12/11/96 | | China |
| FA | 62786 | 1-KR | AJT MSS | 9-522910 12/11/96 | | Japan |
| FA | 62786 | 1-SG | AJT MSS | 704363/98 12/11/96 | | South Korea |
| FA | 62786 | 1-TW | AJT MSS | 9802389-3 12/11/96 | 51957 08/22/00 | Singapore |
| FB | 62786 | 1-RP | AJT MSS | 85109526 08/06/96 | 088844 12/13/97 | Taiwan |
| FB | 62786 | 1-HK | AJT MSS | 96943723.5 12/11/96 | | Europe |
| FP | 62786 | 1-PC | AJT MSS | 99100518.5 02/08/99 | Abandoned | Hong Kong |
| A | 62998 | | AJT MSS | PCT/US96/19819 12/11/96 | Closed | PCT |
| A | 63007 | | AJT JEM | | Closed | |
| A | 63008 | | AJT | | Closed | |
| | | | | 08/801,997 | 5,855,957 | |

I-71935A/MSS (463035-828)
1059128

| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|------------------|--|--|----------------------------------|----------------------|
| | | JEM | DEPOSITION | | | |
| FA | 63008 | TW JEM | OPTIMIZING SiO ₂ FILM CONFORMALITY IN TEOS/03 APCVD | 02/18/97 87012245 | 01/05/99 | |
| FP | 63008 | PC JEM MSS | OPTIMIZATION OF SiO ₂ FILM CONFORMALITY IN ATMOSPHERIC PRESSURE CHEMICAL VAPOR DEPOSITION | 02/18/98 PCT/US98/02842 02/17/98 | 107673 02/02/00 Abandoned. | Taiwan PCT |
| A | 63265 | AJT MSS | LOW K DIELECTRICS PREPARED FROM CROSS-LINKED PPXS (CL-PPXS)/Lee | 08/679,864 07/16/96 | 5,925,420 07/20/99 | |
| FP | 63265 | PC JEM MSS | CROSSLINKED AROMATIC POLYMERS SA LOW K DIELECTRIC/Lee | PCT/US97/10575 07/14/97 | Abandoned. | PCT |
| A | 63347 | AJT MSS | A METHOD OF PLANARIZING A DIELECTRIC LAYER WITH REDUCED HYDROGEN DIFFUSION/ Eskin | Closed | | |
| A | 63579 | AJT MSS | LOW K DIELECTRICS PREPARED FROM PECVD AND PECVD OF SELECTED SILOXANES/Lee | Hold | | |
| A | 63660 | AJT JEM | HIGH TEMPERATURE ROLLER MODULE/Kleiner | 09/019,349 02/05/98 | 5,976,258 11/02/99 | |
| A | 63661 | AJT MSS | METHOD FOR FORMING VERTICALLY EXTENDED EMBEDDED LOW K MATERIALS/Fry | Closed | | |
| A | 63662 | AJT | OPTIMIZATION OF SiO ₂ FILM CONFORMITY | Closed | | |
| A | 63665 | AJT MSS | METHOD OF CONTAMINATION REDUCTION BY FORMATION OF ALL OXIDE SURFACE LAYERS/Bailey, Brady | 08/823,655 03/11/97 | 5,916,378 06/29/99 | |
| FA | 63665 | CN JEM MSS | METHOD OF CONTAMINATION REDUCTION BY FORMATION OF ALL OXIDE SURFACE LAYERS/Bailey, Brady | 98804123.5 03/06/98 | | China |
| FA | 63665 | HK JEM MSS | METHOD OF CONTAMINATION REDUCTION BY FORMATION OF ALL OXIDE SURFACE LAYERS/Bailey, Brady | 00106069.3 09/26/00 | Abandoned | Hong Kong |
| FA | 63665 | JP JEM MSS | METHOD OF CONTAMINATION REDUCTION BY FORMATION OF ALL OXIDE SURFACE LAYERS/Bailey, Brady | 10-339667 03/10/98 | | Japan |
| FA | 63665 | KR JEM | METHOD OF CONTAMINATION REDUCTION BY | 99-7008224 | | South Korea |

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1-71935/MSS (463035-828)
1059128

| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
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| FA | 63665 | SG | MSS | FORMATION OF ALL OXIDE SURFACE LAYERS/Bailey, Brady | 03/06/98 | |
| FA | 63665 | TW | AJT MSS | METHOD OF CONTAMINATION REDUCTION BY FORMATION OF ALL OXIDE SURFACE LAYERS/Bailey, Brady | 9904262-4 03/06/98 | Singapore |
| FB | 63665 | EP | AJT MSS | METHOD OF CONTAMINATION REDUCTION BY FORMATION OF ALL OXIDE SURFACE LAYERS/Bailey, Brady | 87102978 03/02/98 | Taiwan |
| FP | 63665 | PC | AJT MSS | METHOD OF CONTAMINATION REDUCTION BY FORMATION OF ALL OXIDE SURFACE LAYERS/Bailey, Brady | 98910258.7 03/06/98 | Europe |
| A | 63669 | | AJT MSS | FLANGE CLAMP/Mateos, Kamian | PCT/US98/04570 03/06/98 | PCT |
| FP | 63669 | PC | AJT MSS | FLANGE CLAMP/Mateos, Kamian | 08/746,608 11/13/96 | Abandoned |
| A | 63672 | | AJT JEM | LINEAR INJECTOR WITH VACUUM COMPATIBILITY/Moshagh, Lelwell, Herman, Elhal | PCT/US97/20315 11/06/97 | PCT |
| A | 63673 | | AJT JEM MSS | DIRECT DRIVE ROTATIONAL MOTOR WITH AXIAL VACUUM/Moshagh | 08/796,300 02/07/97 | |
| A | 63674 | | AJT MSS | INJECTION SEAL/Miller, Veeck | | |
| A | 63675 | | AJT JEM | EXHAUST VENT ASSEMBLY FOR CHEMICAL VAPOR DEPOSITION SYSTEMS/Moshagh | 08/838,882 04/14/97 | |
| A | 63676 | | AJT JEM | THERMAL CONDITIONING TOWER/Kleiner | 5,938,851 08/17/99 | |
| A | 63677 | | AJT MSS | MONOBLOK INJECTION MODIFICATION/Moshagh | 09/019,342 02/05/98 | |
| A | 64309 | | AJT MSS | NITRIC OXIDE COMPOUND CONDENSER/Gonzalez | Closed | |
| A | 64725 | | AJT | NITROGEN DILUENT GAS FREE OPERATION OF | Combined with A- 59471-3 and closed | |

I-71955/MSS (46303-5-828)
1059128

| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|------------------|--|--|---------------------------|----------------------|
| | | MSS | FLAT PLATE DISCHARGE CELL OZONE GENERATORS/Granados | | | |
| A | 64873 | AJT MSS | WAFER CARRIER AND SEMICONDUCTOR APPARATUS FOR PROCESSING A SEMICONDUCTOR SUBSTRATE/Yao, Bailey | 09/018,021 02/02/98 | 6,026,589 02/22/00 | |
| A | 64873 | 1 AJT MSS | WAFER CARRIER AND SEMICONDUCTOR APPARATUS FOR PROCESSING A SEMICONDUCTOR SUBSTRATE/Yao, Bailey | 09/457,929 12/08/99 Div. of 09/018,021 02/02/98 | | |
| FA | 64873 | CA AJT MSS | WAFER CARRIER AND SEMICONDUCTOR APPARATUS FOR PROCESSING A SEMICONDUCTOR SUBSTRATE/Yao, Bailey | 2319636 02/01/99 | Abandoned | Canada |
| FA | 64873 | CN AJT MSS | WAFER CARRIER AND SEMICONDUCTOR APPARATUS FOR PROCESSING A SEMICONDUCTOR SUBSTRATE/Yao, Bailey | 99802634.4 02/01/99 | | China |
| FA | 64873 | HK AJT MSS | WAFER CARRIER AND SEMICONDUCTOR APPARATUS FOR PROCESSING A SEMICONDUCTOR SUBSTRATE/Yao, Bailey | 01104936.3 07/16/01 | Abandoned | Hong Kong |
| FA | 64873 | IL AJT MSS | WAFER CARRIER AND SEMICONDUCTOR APPARATUS FOR PROCESSING A SEMICONDUCTOR SUBSTRATE/Yao, Bailey | 137533 02/01/99 | Abandoned | Israel |
| FA | 64873 | JP AJT MSS | WAFER CARRIER AND SEMICONDUCTOR APPARATUS FOR PROCESSING A SEMICONDUCTOR SUBSTRATE/Yao, Bailey | 2000-529567 02/01/99 | | Japan |
| FA | 64873 | KR AJT MSS | WAFER CARRIER AND SEMICONDUCTOR APPARATUS FOR PROCESSING A SEMICONDUCTOR SUBSTRATE/Yao, Bailey | 2000-7008430 02/01/99 | 376643 03/06/03 | South Korea |
| FA | 64873 | SG AJT MSS | WAFER CARRIER AND SEMICONDUCTOR APPARATUS FOR PROCESSING A SEMICONDUCTOR SUBSTRATE/Yao, Bailey | 200004218-2 02/01/99 | 74927 08/30/02 | Singapore |
| FA | 64873 | TW AJT MSS | WAFER CARRIER/Yao, Bailey | 88100719 01/18/99 | 122455 03/16/01 | Taiwan |
| FE | 64873 | EP AJT MSS | WAFER CARRIER AND SEMICONDUCTOR APPARATUS FOR PROCESSING A SEMICONDUCTOR SUBSTRATE/Yao, Bailey | 99905586.6 02/01/99 | | Europe |

I-71935/MSS (463035-828)
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| Reference No. | | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
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| FP | 64873 | PC | AJT MSS | WAFER CARRIER/Yeo, Bailey | PCT/US99/02100 02/01/99 | Closed | PCT |
| A | 65583 | | AJT JEM MSS | FREE FLOATING SHIELD/DeDonny, et al. | 09/008,024 01/16/98 | 5,849,083 12/15/98 | |
| A | 65583 | 1 | AJT MSS | FREE FLOATING SHIELD AND SEMICONDUCTOR PROCESSING SYSTEM/Bartholomew, et al. | 09/185,180 11/03/98 CIP of 09/008,024 | 6,056,824 05/02/00 | |
| FP | 65583 | 1-PC | AJT MSS | FREE FLOATING SHIELD AND SEMICONDUCTOR PROCESSING SYSTEM/Bartholomew, et al. | PCT/US98/25740 12/04/98 | Closed | PCT |
| FA | 65583 | 1-CA | AJT MSS | FREE FLOATING SHIELD AND SEMICONDUCTOR PROCESSING SYSTEM/Bartholomew, et al. | 2318147 12/04/98 | | Canada |
| FA | 65583 | 1-CN | AJT MSS | FREE FLOATING SHIELD AND SEMICONDUCTOR PROCESSING SYSTEM/Bartholomew, et al. | 98813641.4 12/04/98 | | China |
| FA | 65583 | 1-HK | AJT MSS | FREE FLOATING SHIELD AND SEMICONDUCTOR PROCESSING SYSTEM/Christopher A. Peabody, Jay B. DeDonny, Lawrence D. Bartholomew | 01104322.0 06/21/01 | Abandoned | Hong Kong |
| FB | 65583 | 1-EP | AJT MSS | FREE FLOATING SHIELD AND SEMICONDUCTOR PROCESSING SYSTEM/Bartholomew, et al. | 98960728.8 12/14/98 | | Europe |
| FA | 65583 | 1-JL | AJT MSS | FREE FLOATING SHIELD AND SEMICONDUCTOR PROCESSING SYSTEM/Bartholomew, et al. | 137315 12/04/98 | Abandoned | Israel |
| FA | 65583 | 1-JP | AJT MSS | FREE FLOATING SHIELD AND SEMICONDUCTOR PROCESSING SYSTEM/Bartholomew, et al. | 2000-540285 12/04/98 | 3416114 04/04/03 | Japan |
| FA | 65583 | 1-KR | AJT MSS | FREE FLOATING SHIELD AND SEMICONDUCTOR PROCESSING SYSTEM/Bartholomew, et al. | 2000-7007859 12/04/98 | 346767 07/18/02 | South Korea |
| FA | 65583 | 1-SG | AJT MSS | FREE FLOATING SHIELD AND SEMICONDUCTOR PROCESSING SYSTEM/Bartholomew, et al. | 200003932-1 12/04/98 | 74790 08/30/02 | Singapore |
| FA | 65583 | 1-TW | AJT MSS | FREE FLOATING SHIELD AND SEMICONDUCTOR PROCESSING SYSTEM/Bartholomew, et al. | 87119658 11/26/98 | 135711 10/27/01 | Taiwan |
| A | 65583 | 2 | AJT MSS | FREE FLOATING SHIELD AND SEMICONDUCTOR PROCESSING SYSTEM/Bartholomew, et al. | 09/492,420 01/27/00 CIP of 09/185,180 | 6,352,592 B1 03/05/02 | |
| FA | 65583 | 2-CA | AJT MSS | FREE FLOATING SHIELD AND SEMICONDUCTOR PROCESSING SYSTEM/Bartholomew, et al. | 2304548 04/07/00 | Abandoned | Canada |

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| Reference No. | | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
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| FA | 65583 | 2-CN | AJT MSS | FREE FLOATING SHIELD AND SEMICONDUCTOR PROCESSING SYSTEM/Bartholomew, et al | 00106454.1 04/10/00 | | China |
| FE | 65583 | 2-EP | AJT MSS | FREE FLOATING SHIELD AND SEMICONDUCTOR PROCESSING SYSTEM/Bartholomew, et al | 00302953.5 04/07/00 | | Europe |
| FA | 65583 | 2-HK | AJT MSS | FREE FLOATING SHIELD AND SEMICONDUCTOR PROCESSING SYSTEM/Bartholomew, et al | 0201266.3 02/21/02 | Abandoned | Hong Kong |
| FA | 65583 | 2-JP | AJT MSS | FREE FLOATING SHIELD AND SEMICONDUCTOR PROCESSING SYSTEM/Bartholomew, et al | 2000-108638 04/10/00 | | Japan |
| FA | 65583 | 2-KR | AJT MSS | FREE FLOATING SHIELD AND SEMICONDUCTOR PROCESSING SYSTEM/Bartholomew, et al | 2000-0018645 04/10/00 | 338891 05/20/02 | South Korea |
| FA | 65583 | 2-MY | AJT MSS | FREE FLOATING SHIELD AND SEMICONDUCTOR PROCESSING SYSTEM/Bartholomew, et al | P120001457 04/07/00 | | Malaysia |
| FA | 65583 | 2-SG | AJT MSS | FREE FLOATING SHIELD AND SEMICONDUCTOR PROCESSING SYSTEM/Bartholomew, et al | 200001878.8 03/31/00 | | Singapore |
| FA | 65583 | 2-TW | AJT MSS | FREE FLOATING SHIELD AND SEMICONDUCTOR PROCESSING SYSTEM/Bartholomew, et al | 89106510 04/08/00 | | Taiwan |
| FA | 65583 | 2-TH | AJT MSS | FREE FLOATING SHIELD AND SEMICONDUCTOR PROCESSING SYSTEM/Bartholomew, et al | 056644 04/03/00 | Abandoned | Thailand |
| A | 65816 | | AJT MSS | CYCLOPHANE DERIVATIVES CONTAINING CROSS-LINKING GROUPS/Golden | Hold. | | |
| A | 65965 | | AJT MSS | LOW K DIELECTRIC INORGANIC/ORGANIC HYBRID FILMS AND METHOD OF MAKING/Rose; Lopata; Felts | 09/067,704- 04/28/98 | 6,068,984 05/30/00 | |
| FA | 65965 | CA | AJT MSS | LOW K DIELECTRIC INORGANIC/ORGANIC HYBRID FILMS AND METHOD OF MAKING/Rose; Lopata; Felts | 2,330,040 04/15/99 | Abandoned | Canada |
| FA | 65965 | CN | AJT MSS | LOW K DIELECTRIC INORGANIC/ORGANIC HYBRID FILMS AND METHOD OF MAKING/Rose; Lopata; Felts | 99806506.4 04/15/99 | | China |
| FA | 65965 | HK | AJT MSS | LOW K DIELECTRIC INORGANIC/ORGANIC HYBRID FILMS AND METHOD OF MAKING/Rose; Lopata; Felts | 01108034.0 11/15/01 | Abandoned | Hong Kong |
| FA | 65965 | IL | AJT MSS | LOW K DIELECTRIC INORGANIC/ORGANIC HYBRID FILMS AND METHOD OF MAKING/Rose; Lopata; Felts | 139128 04/15/99 | Abandoned | Israel |

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| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|-----------------|------------|--|---|----------------------|
| FA | 65965 | JP | AJT MSS | Lopata; Felts LOW K DIELECTRIC INORGANIC/ORGANIC HYBRID FILMS AND METHOD OF MAKING/Rose; Lopata; Felts | 2000-545704 04/15/99 | Japan |
| FA | 65965 | KR | AJT MSS | Lopata; Felts LOW K DIELECTRIC INORGANIC/ORGANIC HYBRID FILMS AND METHOD OF MAKING/Rose; Lopata; Felts | 2000-7012019 04/15/99 | South Korea |
| FA | 65965 | SG | AJT MSS | Lopata; Felts LOW K DIELECTRIC INORGANIC/ORGANIC HYBRID FILMS AND METHOD OF MAKING/Rose; Lopata; Felts | 200005999-8 04/15/99 | Singapore |
| FA | 65965 | TW | AJT MSS | Lopata; Felts LOW K DIELECTRIC INORGANIC/ORGANIC HYBRID FILMS AND METHOD OF MAKING/Rose; Lopata; Felts | 76753 12/07/02 | Taiwan |
| FB | 65965 | HP | AJT MSS | Lopata; Felts LOW K DIELECTRIC INORGANIC/ORGANIC HYBRID FILMS AND METHOD OF MAKING/Rose; Lopata; Felts | 88106881 04/28/99 | Taiwan |
| FP | 65965 | PC | AJT MSS | Lopata; Felts LOW K DIELECTRIC INORGANIC/ORGANIC HYBRID FILMS AND METHOD OF MAKING/Rose; Lopata; Felts | 99917529.2 04/15/99 | Europe |
| A | 65965 | -1 | AJT MSS | Lopata; Felts LOW K DIELECTRIC INORGANIC/ORGANIC HYBRID FILMS AND METHOD OF MAKING/Rose; Lopata; Felts | PCT/US99/08246 04/15/99 | PCT |
| A | 65965 | -2 | AJT MSS | Lopata; Felts LOW K DIELECTRIC INORGANIC/ORGANIC HYBRID FILMS AND METHOD OF MAKING/Rose; Lopata; Felts | 09/361,667 07/27/99 | |
| A | 66484 | | AJT MSS | Lopata; Felts LOW K DIELECTRIC INORGANIC/ORGANIC HYBRID FILMS AND METHOD OF MAKING/Rose; Lopata; Felts | 10/637,913 08/08/03 | |
| FA | 66484 | TW | AJT MSS | Stiffler; McGrogan CHEMICAL VAPOR DEPOSITION APPARATUS EMPLOYING LINEAR INJECTORS FOR DELIVERING GASEOUS CHEMICALS AND METHOD/Dobkin; Stiffler; McGrogan | Abandoned 09/113,730 07/10/98 | |
| FP | 66484 | PC | AJT MSS | Stiffler; McGrogan CHEMICAL VAPOR DEPOSITION APPARATUS EMPLOYING LINEAR INJECTORS FOR DELIVERING GASEOUS CHEMICALS AND METHOD/Dobkin; Stiffler; McGrogan | 147614 04/22/02 | Taiwan |
| | | | | | Abandoned PCT/US99/08702 04/21/99 | PCT |

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| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|-------------------|--|----------------------------|---------------------------|----------------------|
| P | 66959 | | DELIVERING GASEOUS CHEMICALS AND METHOD/Dobler; Striffler; McGrogan | | | |
| A | 66959 | AJT MSS AJT | WAFER PROCESSING REACTOR HAVING A GAS FLOW CONTROL SYSTEM AND METHOD/ Bartholomew | 60/118,286 02/02/99 | Closed | |
| EA | 66959 | AJT MSS | WAFER PROCESSING REACTOR HAVING A GAS FLOW CONTROL SYSTEM AND METHOD/ Bartholomew; Bailey; Ewald; Boland | 09/493,492 01/28/00 | 6,143,680 11/07/00 | |
| FA | 66959 | CA AJT MSS | WAFER PROCESSING REACTOR HAVING A GAS FLOW CONTROL SYSTEM AND METHOD/ Bartholomew; Bailey; Ewald; Boland | 2362694 02/01/00 | Abandoned | Canada |
| FA | 66959 | CN AJT MSS | WAFER PROCESSING REACTOR HAVING A GAS FLOW CONTROL SYSTEM AND METHOD/ Bartholomew; Bailey; Ewald; Boland | 00804644.1 02/01/00 | | China |
| FA | 66959 | HK MSS | WAFER PROCESSING REACTOR HAVING A GAS FLOW CONTROL SYSTEM AND METHOD/ Bartholomew; Bailey; Ewald; Boland | 02104112.3 05/31/02 | Abandoned | Hong Kong |
| FA | 66959 | IL AJT MSS | WAFER PROCESSING REACTOR HAVING A GAS FLOW CONTROL SYSTEM AND METHOD | 144696 02/01/00 | Abandoned | Israel |
| FA | 66959 | IP AJT MSS | WAFER PROCESSING REACTOR HAVING A GAS FLOW CONTROL SYSTEM AND METHOD | 2000-599919 02/01/00 | | Japan |
| FA | 66959 | KR AJT MSS | WAFER PROCESSING REACTOR HAVING A GAS FLOW CONTROL SYSTEM AND METHOD | 2001-7009763 02/01/00 | | South Korea |
| FA | 66959 | SG AJT MSS | WAFER PROCESSING REACTOR HAVING A GAS FLOW CONTROL SYSTEM AND METHOD | 200104725-7 02/01/00 | | Singapore |
| FA | 66959 | TW AJT MSS | WAFER PROCESSING REACTOR HAVING A GAS FLOW CONTROL SYSTEM AND METHOD/ Bartholomew; Bailey; Ewald; Boland | 89101846 02/02/00 | | Taiwan |
| FB | 69959 | EP AJT MSS | WAFER PROCESSING REACTOR HAVING A GAS FLOW CONTROL SYSTEM AND METHOD/ Bartholomew; Bailey; Ewald; Boland | 00910048.3 02/21/00 | | Europe |
| FP | 66959 | PC AJT MSS | WAFER PROCESSING REACTOR HAVING A GAS FLOW CONTROL SYSTEM AND METHOD/ Bartholomew; Bailey; Ewald; Boland | US00/02606 02/01/00 | Closed | PCI |

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1059128

| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|-----------------|------------|---|---------------------------|----------------------|
| A | 66959 | 1 | AJT MSS | WAFER PROCESSING REACTOR HAVING A GAS FLOW CONTROL SYSTEM AND METHOD/ Bartholomew; Bailey; Ewald; Boland. | Closed | |
| P | 67178 | | AJT MSS | GAS DELIVERY METERING TUBE/Stoddard; Yao; Hamilton; Inglet; DeSa; Kudrjavsky; Peabody | 60/135,358 05/21/99 | |
| A | 67178 | | AJT MSS | GAS DELIVERY METERING TUBE/Inglet; Stoddard; Yao; Hamilton; Young; DeSa | 09/470,446 12/22/99 | |
| FA | 67178 | CA | AJT MSS | GAS DELIVERY METERING TUBE/Inglet; Stoddard; Yao; Hamilton; Young; DeSa | 2308758 05/18/00 | Canada |
| FA | 67178 | CN | AJT MSS | GAS DELIVERY METERING TUBE/Inglet; Stoddard; Yao; Hamilton; Young; DeSa | 00108583.2 05/18/00 | China |
| FE | 67178 | EP | AJT MSS | GAS DELIVERY METERING TUBE/Inglet; Stoddard; Yao; Hamilton; Young; DeSa | 00304190.2 05/18/00 | Europe |
| FA | 67178 | HK | AJT MSS | GAS DELIVERY METERING TUBE/Inglet; Stoddard; Yao; Hamilton; Young; DeSa | 01102509.9 04/10/01 | Hong Kong |
| FA | 67178 | JP | AJT MSS | GAS DELIVERY METERING TUBE/Inglet; Stoddard; Yao; Hamilton; Young; DeSa | 2000-148939 05/19/00 | Japan |
| FA | 67178 | KR | AJT MSS | GAS DELIVERY METERING TUBE/Inglet; Stoddard; Yao; Hamilton; Young; DeSa | 2000-0026966 05/19/00 | South Korea |
| FA | 67178 | MY | AJT MSS | GAS DELIVERY METERING TUBE/Inglet; Stoddard; Yao; Hamilton; Young; DeSa | FI-20002163 05/17/00 | Malaysia |
| FA | 67178 | SG | AJT MSS | GAS DELIVERY METERING TUBE/Inglet; Stoddard; Yao; Hamilton; Young; DeSa | 200002705-2 05/16/00 | Singapore |
| FA | 67178 | TH | AJT MSS | GAS DELIVERY METERING TUBE/Inglet; Stoddard; Yao; Hamilton; Young; DeSa | 057695 05/18/00 | Thailand |
| FA | 67178 | TW | AJT MSS | GAS DELIVERY METERING TUBE/Inglet; Stoddard; Yao; Hamilton; Young; DeSa | 89106456 04/07/00 | Taiwan |
| P | 67178 | 1 | MSS MDV | IMPROVED GAS DELIVERY METERING TUBE/DeDonney; DeSa | Unfiled | |
| A | 67178 | 1 | AJT MSS | GAS DELIVERY METERING TUBE/DeDonney; DeSa; Kerita | 09/905,349 07/13/01 | |
| FA | 67178 | 1-CN | MSS MDV | GAS DELIVERY METERING TUBE/Anthony DeSa; Jay B. DeDonney; Samuel Kerita | 02140679.0 07/12/02 | China |

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| Reference No. | | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
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| FA | 67178 | 1-JP | MSS MDV | GAS DELIVERY METERING TUBE/Anthony Deas; Jay B. DeDonney; Samuel Kurita | 2002-206050 07/15/02 | | Japan |
| FA | 67178 | 1-KR | MSS MDV | GAS DELIVERY METERING TUBE/Anthony Deas; Jay B. DeDonney; Samuel Kurita | 2002-0040745 07/12/02 | | South Korea |
| FA | 67178 | 1-MY | MSS MDV | GAS DELIVERY METERING TUBE/Anthony Deas; Jay B. DeDonney; Samuel Kurita | 07/09/02 | | Malaysia |
| FA | 67178 | 1-SG | MSS MDV | GAS DELIVERY METERING TUBE/Anthony Deas; Jay B. DeDonney; Samuel Kurita | 200204131-7 07/09/02 | | Singapore |
| FA | 67178 | 1-TW | MSS MDV | GAS DELIVERY METERING TUBE/Anthony Deas; Jay B. DeDonney; Samuel Kurita | 91115232 07/09/02 | | Taiwan |
| FE | 67178 | 1-EP | MSS MDV | GAS DELIVERY METERING TUBE/Deas; DeDonney; Kurita | 02254962.0 07/15/02 | | Europe |
| A | 67388 | | AJT MSS | METHOD FOR DEPOSITING SILICON DIOXIDE FILM AND PRODUCT/Mahawili | 07/370.331 06/22/89 | Abandoned | |
| FA | 67388 | JP | AJT MSS | METHOD FOR DEPOSITING SILICON DIOXIDE FILM AND PRODUCT/Mahawili | 165499/90 06/22/90 | 2918,300 04/23/99 Abandoned | Japan |
| FA | 67388 | KR | AJT MSS | METHOD FOR DEPOSITING SILICON DIOXIDE FILM AND PRODUCT/Mahawili | 1990-9287 06/22/90 | 162652 09/01/98 Abandoned | South Korea |
| FA | 67388 | TW | AJT MSS | METHOD FOR DEPOSITING SILICON DIOXIDE FILM AND PRODUCT/Mahawili | 79105124 06/22/90 | 50934-08/21/91 Abandoned | Taiwan |
| FE | 67388 | DE | AJT MSS | METHOD FOR DEPOSITING SILICON DIOXIDE FILM AND PRODUCT/Mahawili | 90111648.3 06/20/90 | 0404101 05/01/96 | Germany |
| FE | 67388 | EP | AJT MSS | METHOD FOR DEPOSITING SILICON DIOXIDE FILM AND PRODUCT/Mahawili | 90111648.3 06/20/90 | 0404101 05/01/96 | Europe |
| FE | 67388 | FR | AJT MSS | METHOD FOR DEPOSITING SILICON DIOXIDE FILM AND PRODUCT/Mahawili | 90111648.3 06/20/90 | 0404101 05/01/96 | France |
| FE | 67388 | GB | AJT MSS | METHOD FOR DEPOSITING SILICON DIOXIDE FILM AND PRODUCT/Mahawili | 90111648.3 06/20/90 | 0404101 05/01/96 | Great Britain |
| FE | 67388 | NL | AJT MSS | METHOD FOR DEPOSITING SILICON DIOXIDE FILM AND PRODUCT/Mahawili | 90111648.3 06/20/90 | 0404101 05/01/96 | Netherlands |
| A | 67388 | I | AJT MSS | METHOD FOR DEPOSITING SILICON DIOXIDE FILM AND PRODUCT/Mahawili | 07/661,837 02/27/91 | Abandoned | |

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1059128

| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|-----------------|------------|---|---------------------------|----------------------|
| A | 67389 | | AJT MSS | CHEMICAL VAPOR DEPOSITION REACTOR AND METHOD OF OPERATION/Mahawili | 07/386,903 07/28/89 | |
| FA | 67389 | JP | AJT MSS | CHEMICAL VAPOR DEPOSITION REACTOR AND METHOD OF OPERATION/Mahawili | 4,993,358 02/19/91 | |
| FA | 67389 | KR | AJT MSS | CHEMICAL VAPOR DEPOSITION REACTOR AND METHOD OF OPERATION/Mahawili | Abandoned | Japan |
| FA | 67389 | TW | AJT MSS | CHEMICAL VAPOR DEPOSITION REACTOR AND METHOD OF OPERATION/Mahawili | Abandoned | South Korea |
| FE | 67389 | EP | AJT MSS | CHEMICAL VAPOR DEPOSITION REACTOR AND METHOD OF OPERATION/Mahawili | 79105355 07/29/90 | Taiwan |
| A | 67390 | | AJT MSS | CHEMICAL VAPOR DEPOSITION REACTOR AND METHOD OF OPERATION/Mahawili | 90114325.5 07/26/90 | Europe |
| FA | 67390 | JP | AJT MSS | MULTI-ZONE PLANAR HEATER ASSEMBLY AND METHOD OF OPERATION/Mahawili | 07/409,125 09/19/89 | |
| FA | 67390 | KR | AJT MSS | MULTI-ZONE PLANAR HEATER ASSEMBLY AND METHOD OF OPERATION/Mahawili | 242305/90 09/12/90 | Japan |
| FA | 67390 | TW | AJT MSS | MULTI-ZONE PLANAR HEATER ASSEMBLY AND METHOD OF OPERATION/Mahawili | 14732/90 09/18/90 | South Korea |
| FE | 67390 | EP | AJT MSS | MULTI-ZONE PLANAR HEATER ASSEMBLY AND METHOD OF OPERATION/Mahawili | 79105354 07/29/90 | Taiwan |
| FE | 67390 | DE | AJT MSS | MULTI-ZONE PLANAR HEATER ASSEMBLY AND METHOD OF OPERATION/Mahawili | 90115336.1 08/10/90 | Europe |
| FE | 67390 | FR | AJT MSS | MULTI-ZONE PLANAR HEATER ASSEMBLY AND METHOD OF OPERATION/Mahawili | 90115336.1 08/10/90 | Germany |
| FE | 67390 | NL | AJT MSS | MULTI-ZONE PLANAR HEATER ASSEMBLY AND METHOD OF OPERATION/Mahawili | 90115336.1 08/10/90 | France |
| FE | 67390 | GB | AJT MSS | MULTI-ZONE PLANAR HEATER ASSEMBLY AND METHOD OF OPERATION/Mahawili | 90115336.1 08/10/90 | Netherlands |
| A | 67391 | | AJT MSS | METHOD OF SOLDERING IN A CONTROLLED-CONVECTION SURFACE-MOUNT REFLOW FURNACE/Alley, Connors, Daley, Roffey | 90115336.1 08/10/90 | Great Britain |
| A | 67392 | | AJT MSS | METHOD FOR PRODUCING HIGHLY CONDUCTIVE AND TRANSPARENT FILMS OF TIN AND FLUORIDE DOPED INDIUM OXIDE BY | 5,232,145 08/03/93 | |
| | | | | | 5,122,391 06/16/92 | |

1-71935/MSS (463035-828)
1059128

| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
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| FA | 67392 | JP | AJT MSS | APCVD/Mayer | | |
| | | | | METHOD FOR PRODUCING HIGHLY CONDUCTIVE AND TRANSPARENT FILMS OF TIN AND FLUORIDE DOPED INDIUM OXIDE BY APCVD/Mayer | Abandoned | Japan |
| FA | 67392 | KR | AJT MSS | APCVD/Mayer | | |
| | | | | METHOD FOR PRODUCING HIGHLY CONDUCTIVE AND TRANSPARENT FILMS OF TIN AND FLUORIDE DOPED INDIUM OXIDE BY APCVD/Mayer | Abandoned | South Korea |
| FB | 67392 | EP | AJT MSS | APCVD/Mayer | | |
| | | | | METHOD FOR PRODUCING HIGHLY CONDUCTIVE AND TRANSPARENT FILMS OF TIN AND FLUORIDE DOPED INDIUM OXIDE BY APCVD/Mayer | Abandoned | Europe |
| A | 67392 | 1 | AJT MSS | APCVD/Mayer | | |
| | | | | METHOD AND APPARATUS FOR PRODUCING HIGHLY CONDUCTIVE AND TRANSPARENT FILMS OF TIN AND FLUORIDE DOPED INDIUM OXIDE BY APCVD/Mayer | Abandoned | |
| P | 67588 | | AJT MSS | PROTECTIVE GAS SHIELD APPARATUS/Stoddard, Yuh | Closed | |
| A | 67588 | | AJT MSS | PROTECTIVE GAS SHIELD APPARATUS/Stoddard, Yuh | 60/135,362 05/21/99 | |
| FA | 67588 | CN | AJT MSS | PROTECTIVE GAS SHIELD APPARATUS/Stoddard, Yuh | 09/574,826 05/19/00 | |
| FA | 67588 | JP | AJT MSS | PROTECTIVE GAS SHIELD APPARATUS/Stoddard, Yuh | 08807884X 05/19/00 | China |
| FA | 67588 | KR | AJT MSS | PROTECTIVE GAS SHIELD APPARATUS/Neil; Stoddard, Yuh | 2000-620151 05/19/00 | Japan |
| FA | 67588 | SG | AJT MSS | PROTECTIVE GAS SHIELD APPARATUS/Neil; Stoddard, Yuh | 2001-7014850 05/19/00 | South Korea |
| FA | 67588 | TW | AJT MSS | PROTECTIVE GAS SHIELD APPARATUS/Neil; Stoddard, Yuh | 200107153-9 05/19/00 | Singapore |
| FB | 67588 | EP | AJT MSS | PROTECTIVE GAS SHIELD APPARATUS/Stoddard, Yuh | 89109705 05/19/00 | Taiwan |
| FP | 67588 | PC | AJT | PROTECTIVE GAS SHIELD APPARATUS/Stoddard; Yuh | 00936074.4 05/19/00 | Europe |
| | | | | PROTECTIVE GAS SHIELD APPARATUS/Stoddard, Yuh | PCT/US00/13754 closed | PCT |

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1059128

| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
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| | | Yeh | | | | |
| P | 67588 | -1 | MSS | 05/19/00 | | |
| | | | AJT | Unfiled | | |
| P | 67735 | | AJT | 60/127,520 04/02/99 | Closed | |
| | | | MSS | | | |
| A | 67735 | | AJT | 09/541,395 03/31/00 | 6,387,764 Issued: 05/14/02 | |
| | | | MSS | | | |
| FA | 67735 | CA | AJT | 2364975 03/31/00 | Abandoned | Canada |
| | | | MSS | | | |
| FA | 67735 | CN | AJT | 00807742.8 03/31/00 | | China |
| | | | MSS | | | |
| FA | 67735 | IL | AJT | 145608 03/31/00 | Abandoned | Israel |
| | | | MSS | | | |
| FA | 67735 | JP | AJT | 2000-610059 03/31/00 | | Japan |
| | | | MSS | | | |
| FA | 67735 | KR | AJT | 2001-7012564 03/31/00 | | South Korea |
| | | | MSS | | | |
| FA | 67735 | SG | AJT | 200105864-3 03/31/00 | | Singapore |
| | | | MSS | | | |

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| Reference No. | | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|----|-------------------|---|----------------------------|---------------------------|----------------------|
| FA | 67735 | TW | AJT MSS | TRENCH ISOLATION PROCESS USING APCVD TEOS-OZONE TO DEPOSIT A TRENCH FILL OXIDE PRIOR TO SIDEWALL LINER OXIDATION GROWTH/ Curcio; Rao; Kaplan | 89106191 04/01/00 | | Taiwan |
| FB | 67735 | EP | AJT MSS | TRENCH ISOLATION PROCESS USING APCVD TEOS-OZONE TO DEPOSIT A TRENCH FILL OXIDE PRIOR TO SIDEWALL LINER OXIDATION GROWTH/ Curcio; Rao; Kaplan | 00919996.9 03/31/00 | | |
| FP | 67735 | PC | AJT MSS | TRENCH ISOLATION PROCESS USING APCVD TEOS-OZONE TO DEPOSIT A TRENCH FILL OXIDE PRIOR TO SIDEWALL LINER OXIDATION GROWTH/ Curcio; Rao; Kaplan | PCT/US00/08650 03/31/00 | | PCT |
| P | 67736 | | AJT MSS VEJ | NEAR-ATMOSPHERIC CVD SYSTEM WITH VERTICALLY-STACKED PROCESS CHAMBERS/ Carvalho; Mayer; Menagh; Savage; Vaughan | 60/127,532 04/02/99 | Closed | |
| A | 67736 | | AJT MSS VEJ | SEMICONDUCTOR WAFER PROCESS SYSTEM WITH VERTICALLY-STACKED PROCESS CHAMBERS AND SINGLE-AXIS DUAL-WAFER TRANSFER SYSTEM/Savage; Menagh; Carvalho; Troiani; Cozzentino; Vaughan; Mayer | 09/483,945 01/13/00 | 6,610,150 08/26/03 | |
| FA | 67736 | CA | AJT MSS | SEMICONDUCTOR WAFER PROCESSING SYSTEM WITH VERTICALLY-STACKED PROCESS CHAMBERS AND SINGLE-AXIS DUAL-WAFER TRANSFER SYSTEM/Savage; Menagh; Carvalho; Troiani; Cozzentino; Vaughan; Mayer | 2369042 03/21/00 | Abandoned | Canada |
| FA | 67736 | CN | AJT MSS | SEMICONDUCTOR WAFER PROCESSING SYSTEM WITH VERTICALLY-STACKED PROCESS CHAMBERS AND SINGLE-AXIS DUAL-WAFER TRANSFER SYSTEM/Savage; Menagh; Carvalho; Troiani; Cozzentino; Vaughan; Mayer | 008006652.3 03/21/00 | | China |
| FA | 67736 | IL | AJT MSS | SEMICONDUCTOR WAFER PROCESSING SYSTEM WITH VERTICALLY-STACKED PROCESS CHAMBERS AND SINGLE-AXIS DUAL-WAFER TRANSFER SYSTEM/Savage; Menagh; Carvalho; Troiani; Cozzentino; Vaughan; Mayer | 145678 03/21/00 | Abandoned | Israel |

I-71955/MSS (463035-828)
1059128

| Reference No. | | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
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| FA | 67736 | IP | AJT MSS | SEMICONDUCTOR WAFER PROCESSING SYSTEM WITH VERTICALLY-STACKED PROCESS CHAMBERS AND SINGLE-AXIS DUAL-WAFER TRANSFER SYSTEM/Savage; Menagh; Carvalheira; Troiani; Cosentino; Vaughan; Mayer | 2000-609844 03/21/00 | | Japan |
| FA | 67736 | KR | AJT MSS | SEMICONDUCTOR WAFER PROCESSING SYSTEM WITH VERTICALLY-STACKED PROCESS CHAMBERS AND SINGLE-AXIS DUAL-WAFER TRANSFER SYSTEM/Savage; Menagh; Carvalheira; Troiani; Cosentino; Vaughan; Mayer | 2001-7012462 03/21/00 | | South Korea |
| FA | 67736 | SG | AJT MSS | SEMICONDUCTOR WAFER PROCESSING SYSTEM WITH VERTICALLY-STACKED PROCESS CHAMBERS AND SINGLE-AXIS DUAL-WAFER TRANSFER SYSTEM/Savage; Menagh; Carvalheira; Troiani; Cosentino; Vaughan; Mayer | 200105951-8 03/21/00 | | Singapore |
| FA | 67736 | TW | AJT MSS VEJ | SEMICONDUCTOR WAFER PROCESS SYSTEM WITH VERTICALLY-STACKED PROCESS CHAMBERS AND SINGLE-AXIS DUAL-WAFER TRANSFER SYSTEM/Savage; Menagh; Carvalheira; Troiani; Cosentino; Vaughan; Mayer | 89106019 03/31/00 | | Taiwan |
| FE | 67736 | EP | AJT MSS DW | SEMICONDUCTOR WAFER PROCESSING SYSTEM WITH VERTICALLY-STACKED PROCESS CHAMBERS AND SINGLE-AXIS DUAL-WAFER TRANSFER SYSTEM/Savage; Menagh; Carvalheira; Troiani; Cosentino; Vaughan; Mayer | 0091829.7 03/21/00 | | Europe |
| FP | 67736 | PC | AJT MSS VEJ | SEMICONDUCTOR WAFER PROCESS SYSTEM WITH VERTICALLY-STACKED PROCESS CHAMBERS AND SINGLE-AXIS DUAL-WAFER TRANSFER SYSTEM/Savage; Menagh; Carvalheira; Troiani; Cosentino; Vaughan; Mayer | PCT/US00/07509 03/21/00 | Closed | PCT |
| A | 67736 | 1 | AJT MSS | SEMICONDUCTOR WAFER PROCESS SYSTEM WITH VERTICALLY-STACKED PROCESS CHAMBERS AND SINGLE-AXIS DUAL-WAFER TRANSFER SYSTEM/Savage; Menagh; Carvalheira; Troiani; Cosentino; Vaughan; Mayer | 09/767,659 01/22/01 Divisional of 09/483,945 filed 01/13/00 | | |
| A | 67736 | 2 | AJT | SEMICONDUCTOR WAFER PROCESSING SYSTEM WITH VERTICALLY-STACKED PROCESS | 09/996,869 | | |

I-71935/MSS (463035-828)
1069128

| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|-------------------|--|----------------------------|---------------------------------|----------------------|
| P | 67737 | MSS | CHAMBERS AND SINGLE-AXIS DUAL-WAFER TRANSFER SYSTEM/Savage; Menagh; Carvalhira; Troiani; Cosentino; Vaughan; Mayer | 11/27/01 | | |
| P | 68017 | AJT MSS VEJ | SINGLE-AXIS DUAL-WAFER TRANSFER SYSTEM/Troiani; Cosentino | 60/127,650 04/02/99 | Merged into P-67736 & Closed | |
| A | 68017 | AJT MSS WEN | IMPROVED SURFACE COMPOSITION AND METHOD FOR METAL COMPONENTS/Bailey; Michael; Kano | 60/130,783 04/23/99 | Closed | |
| FA | 68017 | CA | CHEMICAL VAPOR DEPOSITION SYSTEM/Bailey; Michael; Kano | 09/480,730 01/06/00 | 6,206,973 03/27/01 | |
| FA | 68017 | CN | CHEMICAL VAPOR DEPOSITION SYSTEM/Bailey; Michael; Kano | 2371353 03/03/00 | Abandoned | Canada |
| FA | 67017 | IL | CHEMICAL VAPOR DEPOSITION SYSTEM/Bailey; Michael; Kano | 00808554.4 03/03/00 | | China |
| FA | 68017 | JP | CHEMICAL VAPOR DEPOSITION SYSTEM/Bailey; Michael; Kano | 146135 03/03/00 | Abandoned | Israel |
| FA | 68017 | KR | CHEMICAL VAPOR DEPOSITION SYSTEM/Bailey; Michael; Kano | 2000-613851 03/03/00 | | Japan |
| FA | 68017 | SG | CHEMICAL VAPOR DEPOSITION SYSTEM/Bailey; Michael; Kano | 2001-7013598 03/03/00 | | South Korea |
| FA | 68017 | TW | CHEMICAL VAPOR DEPOSITION SYSTEM/Bailey; Michael; Kano | 20010613-5 03/03/00 | | Singapore |
| FE | 68017 | HP | CHEMICAL VAPOR DEPOSITION SYSTEM/Bailey; Michael; Kano | 89104518 03/13/00 | | Taiwan |
| FP | 68017 | PC | CHEMICAL VAPOR DEPOSITION SYSTEM/Bailey; Michael; Kano | 00912173.2 03/03/00 | | Europe |
| A | 68017 | 1 | CHEMICAL VAPOR DEPOSITION SYSTEM/Bailey; Michael; Kano | PCT/US00/05630 03/03/00 | Closed | PCT |
| | | | CHEMICAL VAPOR DEPOSITION SYSTEM AND METHOD/Bailey; Michael; Kano | 09/704,644 11/01/00 | 6,485,783 | |

I-7193/MSS (463035-828)
1059128

| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|---|-------------------|----------------------------|---------------------------|----------------------|
| P | 68048 | | WEN | | 11/26/02 | |
| | | EQUAL FLOW SPLIT GAS DELIVERY APPARATUS/Bartholomew, Yuh; Stumbo, King, Chan | AJT MSS WEN | 60/134,443 05/17/99 | Closed | |
| A | 68048 | | | | | |
| | | GAS DISTRIBUTION SYSTEM/Bartholomew, Yuh; Stumbo, King, Chan | AJT MSS WEN | 09/494,620 01/31/00 | Abandoned | |
| FA | 68048 | CA | AJT MSS WEN | 2308832 05/15/00 | Abandoned | Canada |
| FA | 68048 | CN | AJT MSS WEN | 00108549.2 05/17/00 | | China |
| FE | 68048 | EP | AJT MSS WEN | 00304070.6 05/15/00 | | Europe |
| FA | 68048 | HK | AJT MSS WEN | 01102640.9 04/12/01 | Abandoned | Hong Kong |
| FA | 68048 | JP | AJT MSS WEN | 2000-144513 05/17/00 | | Japan |
| FA | 68048 | KR | AJT MSS WEN | 2000-0026027 05/16/00 | | South Korea |
| FA | 68048 | MY | AJT MSS WEN | PI20002031 05/10/00 | | Malaysia |
| FA | 68048 | SG | AJT MSS WEN | 200002470-3 05/09/00 | 87112 10/16/02 | Singapore |
| FA | 68048 | TH | AJT MSS WEN | 057654 05/16/00 | Abandoned | Thailand |
| FA | 68048 | TW | AJT | 89109368 | | Taiwan |

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1059128

| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|--------------------|------------|--|----------------------------|------------------------------|
| | | Stumbo; King; Chen | | 05/16/00 | | |
| A | 68048 | 1 | MSS WEN | GAS DISTRIBUTION SYSTEM/Bardolomew; Yuh; Mark; King, Chen | 10/219,924 08/14/02 | Abandoned |
| P | 68073 | | AJT MSS | CHEMICAL VAPOR DEPOSITION OF SILICON DIOXIDE BY USING ALKYL SILOXANE OLIGOMERS WITH OZONE FOR SUB 0.18 MICRON DEVICE APPLICATIONS IN VLSI/Jan; Yuan | 60/143,198 07/09/99 | Closed |
| A | 68073 | | AJT MSS | CHEMICAL VAPOR DEPOSITION OF SILICON DIOXIDE BY USING ALKYL SILOXANE OLIGOMERS WITH OZONE FOR SUB 0.18 MICRON DEVICE APPLICATIONS IN VLSI/Jan; Yuan | 09/542,612 04/04/00 | 6465044 10/15/02 |
| FA | 68073 | CN | AJT MSS | CHEMICAL VAPOR DEPOSITION OF SILICON OXIDE FILMS USING ALKYL SILOXANE OLIGOMERS WITH OZONE/Jan; Yuan | 00811030.1 06/15/00 | China |
| FA | 68073 | JP | AJT MSS | CHEMICAL VAPOR DEPOSITION OF SILICON OXIDE FILMS USING ALKYL SILOXANE OLIGOMERS WITH OZONE/Jan; Yuan | 2001-509075 06/15/00 | Japan |
| FA | 68073 | KR | AJT MSS | CHEMICAL VAPOR DEPOSITION OF SILICON OXIDE FILMS USING ALKYL SILOXANE OLIGOMERS WITH OZONE/Jan; Yuan | 2002-7000308 06/15/00 | South Korea |
| FA | 68073 | SG | AJT MSS | CHEMICAL VAPOR DEPOSITION OF SILICON OXIDE FILMS USING ALKYL SILOXANE OLIGOMERS WITH OZONE/Jan; Yuan | 06/15/00 | Singapore |
| FA | 68073 | TW | AJT MSS | CHEMICAL VAPOR DEPOSITION OF SILICON OXIDE FILMS USING ALKYL SILOXANE OLIGOMERS WITH OZONE | 89113435 07/06/00 | 153183 07/25/02 Taiwan |
| FE | 68073 | EP | AJT MSS | CHEMICAL VAPOR DEPOSITION OF SILICON OXIDE FILMS USING ALKYL SILOXANE OLIGOMERS WITH OZONE/Jan; Yuan | 00939940.3 06/15/00 | Europe |
| FP | 68073 | PC | AJT MSS | CHEMICAL VAPOR DEPOSITION OF SILICON OXIDE FILMS USING ALKYL SILOXANE OLIGOMERS WITH OZONE | PCT/US00/16642 06/15/00 | Closed PCT |
| P | 68244 | | AJT | METHOD FOR IN-SITU CLEANING OF SILICON | 60/143,285 | Closed |

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1059128

| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|-----------------|--|----------------------------|---------------------------|----------------------|
| | | MSS | | 07/12/99 | | |
| A | 68244 | | DIOXIDE DEPOSITION CHAMBERS USING COMBINATION FLUORINE CHEMISTRIES/Mayer, et al. | | | |
| | | AJT MSS | | 09/615,085 07/12/00 | 6,544,345 04/08/03 | |
| FA | 68244 | CN | METHOD FOR IN-SITU CLEANING OF SILICON DIOXIDE DEPOSITION CHAMBERS USING COMBINATION FLUORINE CHEMISTRIES/Mayer, et al. | 00811232.0 07/12/00 | | China |
| FA | 68244 | JP | METHOD AND SYSTEM FOR IN-SITU CLEANING OF SEMICONDUCTOR MANUFACTURING EQUIPMENT USING COMBINATION CHEMISTRIES/Mayer, et al. | 2001-509320 07/12/00 | | Japan |
| FA | 68244 | KR | METHOD AND SYSTEM FOR IN-SITU CLEANING OF SEMICONDUCTOR MANUFACTURING EQUIPMENT USING COMBINATION CHEMISTRIES/Mayer, et al. | 2002-7000480 07/12/00 | | South Korea |
| FA | 68244 | SG | METHOD AND SYSTEM FOR IN-SITU CLEANING OF SEMICONDUCTOR MANUFACTURING EQUIPMENT USING COMBINATION CHEMISTRIES/Mayer et al. | 200200181-6 07/12/00 | | Singapore |
| FA | 68244 | TW | METHOD FOR IN-SITU CLEANING OF SILICON DIOXIDE DEPOSITION CHAMBERS USING COMBINATION FLUORINE CHEMISTRIES/Mayer et al. | 89113887 07/18/00 | | Taiwan |
| FE | 68244 | EP | METHOD AND SYSTEM FOR IN-SITU CLEANING OF SEMICONDUCTOR MANUFACTURING EQUIPMENT USING COMBINATION CHEMISTRIES/Mayer et al. | 00958006.9 07/12/00 | | Europe |
| EP | 68244 | PC | METHOD FOR IN-SITU CLEANING OF SILICON DIOXIDE DEPOSITION CHAMBERS USING COMBINATION FLUORINE CHEMISTRIES/Mayer et al. | PCT/US00/40359 07/12/00 | Closed | PCT |
| P | 68628 | | SYSTEM AND METHOD FOR DEPOSITING | 60/166,662 | Closed | |

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1059128

| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|-----------------|------------|---|----------------------------|----------------------|
| | | | | | | |
| A | 68628 | | MSS | INORGANIC/ORGANIC DIELECTRIC FILMS/Lopata; Felts | 11/19/99 | |
| FA | 68628 | | AJT MSS | SYSTEM AND METHOD FOR DEPOSITING INORGANIC/ORGANIC DIELECTRIC FILMS/Lopata; Felts | 09/715,455 11/17/00 | |
| FA | 68628 | CN | AJT MSS | SYSTEM AND METHOD FOR DEPOSITING INORGANIC/ORGANIC DIELECTRIC FILMS/Lopata; Felts | 00816928.4 11/17/00 | China |
| FA | 68628 | JP | AJT MSS | SYSTEM AND METHOD FOR DEPOSITING INORGANIC/ORGANIC DIELECTRIC FILMS/Lopata; Felts | 2001-538578 11/17/00 | Japan |
| FA | 68628 | KR | AJT MSS | SYSTEM AND METHOD FOR DEPOSITING INORGANIC/ORGANIC DIELECTRIC FILMS/Lopata; Felts | 11/17/00 | South Korea |
| FA | 68628 | MY | AJT MSS | SYSTEM AND METHOD FOR DEPOSITING INORGANIC/ORGANIC DIELECTRIC FILMS/Lopata; Felts | PI2005431 11/20/00 | Malaysia |
| FA | 68628 | SG | AJT MSS | SYSTEM AND METHOD FOR DEPOSITING INORGANIC/ORGANIC DIELECTRIC FILMS/Lopata; Felts | 11/17/00 | Singapore |
| FA | 68628 | TW | AJT MSS | SYSTEM AND METHOD FOR DEPOSITING INORGANIC/ORGANIC DIELECTRIC FILMS | 89124488 11/18/00 | Taiwan |
| FE | 68628 | EP | AJT MSS | SYSTEM AND METHOD FOR DEPOSITING INORGANIC/ORGANIC DIELECTRIC FILMS/Lopata; Felts | 00980511.0 11/17/00 | Europe |
| FP | 68628 | PC | AJT MSS | SYSTEM AND METHOD FOR DEPOSITING INORGANIC/ORGANIC DIELECTRIC FILMS/Lopata; Felts | PCT/US00/31694 11/17/00 | PCT |
| A | 68894 | | AJT MSS | CHEMICAL VAPOR DEPOSITION APPARATUS/Campbell; Miller | 4,545,327 10/08/85 | |
| FA | 68894 | AU | AJT MSS | CHEMICAL VAPOR DEPOSITION APPARATUS AND PROCESS/Campbell; Miller | 18480/83 08/26/83 | Australia |
| FA | 68894 | CA | AJT MSS | CHEMICAL VAPOR DEPOSITION APPARATUS AND PROCESS/Campbell; Miller | 435,134 08/23/83 | Canada |

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1059128

| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|-----------------|------------|---|------------------------------|----------------------|
| FA | 68894 | IL | AJT MSS | CHEMICAL VAPOR DEPOSITIONS PROCESS/ Campbell; Miller | Abandoned | |
| FA | 68894 | IL-1 | AJT MSS | CHEMICAL VAPOR DEPOSITION PROCESS/ Campbell; Miller | Abandoned | Israel |
| FA | 68894 | JP | AJT MSS | CHEMICAL VAPOR DEPOSITION APPARATUS AND PROCESS/Campbell; Miller | 80079 07/01/87 | Israel |
| FE | 68894 | EP | AJT MSS | CHEMICAL VAPOR DEPOSITION APPARATUS AND PROCESS/Campbell; Miller | Abandoned | |
| A | 68894 | I | AJT MSS | CHEMICAL VAPOR DEPOSITION APPARATUS AND PROCESS/Campbell; Miller | 1446905 06/30/88 | Japan |
| A | 68895 | | AJT MSS | CHEMICAL VAPOR DEPOSITION APPARATUS/ Campbell; DuBois; Manriquez; Miller | Abandoned | Europe |
| FA | 68895 | AU | AJT MSS | CHEMICAL VAPOR DEPOSITION APPARATUS/ Campbell; DuBois; Manriquez; Miller | 4,547,404 10/15/85 | |
| FA | 68895 | CA | AJT MSS | CHEMICAL VAPOR DEPOSITION APPARATUS/ Campbell; DuBois; Manriquez; Miller | 4,539,933 09/10/85 | |
| FA | 68895 | CA-1 | AJT MSS | CHEMICAL VAPOR DEPOSITION APPARATUS/ Campbell; DuBois; Manriquez; Miller | 572883 08/30/84 Abandoned | Australia |
| FA | 68895 | TW | AJT MSS | CHEMICAL VAPOR DEPOSITION APPARATUS/ Campbell; DuBois; Manriquez; Miller | 1,216,419 01/13/87 | Canada |
| FE | 68895 | EP | AJT MSS | CHEMICAL VAPOR DEPOSITION APPARATUS/ Campbell; DuBois; Manriquez; Miller | Abandoned | |
| A | 68896 | | AJT MSS | CHEMICAL VAPOR DEPOSITION APPARATUS/ Campbell; DuBois; Manriquez; Miller | 1,236,970 05/24/88 | Canada |
| FA | 68896 | JP | AJT MSS | CHEMICAL VAPOR DEPOSITION APPARATUS/ Campbell; DuBois; Manriquez; Miller | Abandoned | |
| FA | 68896 | | AJT MSS | CHEMICAL VAPOR DEPOSITION APPARATUS/ Campbell; DuBois; Manriquez; Miller | 23307 12/28/85 | Taiwan |
| FA | 68896 | | AJT MSS | CHEMICAL VAPOR DEPOSITION APPARATUS/ Campbell; DuBois; Manriquez; Miller | Abandoned | |
| FA | 68896 | | AJT MSS | CHEMICAL VAPOR DEPOSITION APPARATUS/ Campbell; DuBois; Manriquez; Miller | 0137702 03/21/90 | Europe |
| FA | 68896 | | AJT MSS | CHEMICAL VAPOR DEPOSITION APPARATUS/ Campbell; DuBois; Manriquez; Miller | Abandoned | |
| FA | 68896 | | AJT MSS | CHEMICAL VAPOR DEPOSITION APPARATUS/ Campbell; DuBois; Manriquez; Miller | 4,548,159 10/22/85 | |
| FA | 68896 | | AJT MSS | CHEMICAL VAPOR DEPOSITION APPARATUS/ Campbell; DuBois; Manriquez; Miller | 1451172 07/25/88 | Japan |

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| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
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| A | 68897 | AJT | MSS | CHEMICAL VAPOR DEPOSITION WAFER BOAT/ Learm; DuBois | 06/607,065 05/04/84 | |
| FA | 68897 | CA | AJT MSS | CHEMICAL VAPOR DEPOSITION WAFER BOAT/ Learm; DuBois | 4,582,020 04/15/86 | |
| FA | 68897 | JP | AJT MSS | CHEMICAL VAPOR DEPOSITION WAFER BOAT/ Learm; DuBois | 480,118 04/25/85 | Canada |
| A | 68897 | 1 | AJT MSS | CHEMICAL VAPOR DEPOSITION WAFER BOAT/ Learm; DuBois | 93957/85 05/02/85 | Japan |
| A | 68897 | 2 | AJT MSS | CHEMICAL VAPOR DEPOSITION WAFER BOAT/ Learm; DuBois | 06/804,934 12/03/85 Continuation of 06/607,065 | |
| A | 68898 | | AJT MSS | PRIMARY FLOW CVD APPARATUS COMPRISING GAS PREHEATER AND MEANS FOR SUBSTANTIALLY EDDY-FREE GAS FLOW/Learm; DuBois; Miller; Sellheimer | 06/828,625 02/10/86 Continuation of 06/607,065 | |
| FA | 68898 | CA | AJT MSS | PRIMARY FLOW CVD APPARATUS AND METHOD/ Learm; DuBois; Miller; Sellheimer | 4,694,778 09/22/87 Abandoned | |
| FA | 68898 | JP | AJT MSS | PRIMARY FLOW CVD APPARATUS AND METHOD/ Learm; DuBois; Miller; Sellheimer | 5,320,680 06/14/94 | Canada |
| FA | 68898 | KR | AJT MSS | PRIMARY FLOW CVD APPARATUS AND METHOD/ Learm; DuBois; Miller; Sellheimer | 2,109,198 04/09/92 | Japan |
| FE | 68898 | CH | AJT MSS | PRIMARY FLOW CVD APPARATUS AND METHOD/ Learm; DuBois; Miller; Sellheimer | 510862/92 04/09/92 | South Korea |
| FE | 68898 | DB | AJT MSS | PRIMARY FLOW CVD APPARATUS AND METHOD/ Learm; DuBois; Miller; Sellheimer | 703234/1993 10/25/93 | Switzerland |
| FE | 68898 | EP | AJT MSS | PRIMARY FLOW CVD APPARATUS AND METHOD/ Learm; DuBois; Miller; Sellheimer | 92911855.2 04/09/92 | Germany |
| FE | 68898 | FR | AJT | PRIMARY FLOW CVD APPARATUS AND METHOD/ Learm; DuBois; Miller; Sellheimer | 0267520 07/05/00 0585343 12/08/99 Abandoned | Europe |
| | | | | | 69230401.0 12/08/99 | France |

I-71934/MSS (463035-828)
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| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
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| FE | 68898 | GB | MSS | Learn; DuBois; Miller; Sellheimer | 04/09/92 | |
| FE | 68898 | IT | AJT | PRIMARY FLOW CVD APPARATUS AND METHOD/ Learn; DuBois; Miller; Sellheimer | 92911855.2 | |
| FE | 68898 | NL | MSS | 04/09/92 | 0585343 | United Kingdom |
| FE | 68898 | PC | AJT | PRIMARY FLOW CVD APPARATUS AND METHOD/ Learn; DuBois; Miller; Sellheimer | 92911855.2 | |
| FE | 68898 | PC | MSS | 04/09/92 | 0585343 | Italy |
| FE | 68898 | PC | AJT | PRIMARY FLOW CVD APPARATUS AND METHOD/ Learn; DuBois; Miller; Sellheimer | 92911855.2 | |
| FE | 68898 | PC | MSS | 04/09/92 | 0585343 | Netherlands |
| A | 68899 | | AJT | PRIMARY FLOW CVD APPARATUS AND METHOD/ Learn; DuBois; Miller; Sellheimer | PCT/US92/02666 | |
| A | 68899 | 1 | MSS | 04/09/92 | Closed | PCT |
| FP | 68899 | 1-PC | AJT | THERMAL PROCESSING APPARATUS AND PROCESS/Porter; Sanchez; Kowalski | 08/399,108 | |
| FP | 68899 | 1-EP | MSS | 03/03/95 | 5,626,680 | |
| FP | 68899 | 1-IP | AJT | THERMAL PROCESSING APPARATUS AND PROCESS/Porter; Sanchez; Kowalski | 08/565,177 | |
| FP | 68899 | 1-KR | MSS | 11/28/95 | 5,679,168 | |
| FP | 68899 | 2 | AJT | CIP of 08/399,108 | 10/21/97 | |
| FE | 68899 | 1-EP | AJT | THERMAL PROCESSING APPARATUS AND PROCESS/Porter; Sanchez; Kowalski | PCT/US96/02440 | |
| FE | 68899 | 1-IP | MSS | 03/04/96 | Closed | PCT |
| FE | 68899 | 1-KR | AJT | THERMAL PROCESSING APPARATUS AND PROCESS/Porter; Sanchez; Kowalski | 96906598.6 | |
| FE | 68899 | 2-PC | MSS | 03/04/96 | | Europe |
| FE | 68899 | 2-EP | AJT | THERMAL PROCESSING APPARATUS AND PROCESS/Porter; Sanchez; Kowalski | 526893/96 | |
| FE | 68899 | 2-IP | MSS | 09/01/97 | | Japan |
| FE | 68899 | 2-KR | AJT | THERMAL PROCESSING APPARATUS AND PROCESS/Porter; Sanchez; Kowalski | 706100/1997 | |
| FE | 68899 | 2-PC | MSS | 09/02/97 | | South Korea |
| FE | 68899 | 2-EP | AJT | THERMAL PROCESSING APPARATUS AND PROCESS/Koble, Jr.; Dip; Engdahl; Oliver; Radtiff | 08/563,875 | |
| FE | 68899 | 2-IP | MSS | 11/28/95 | 5,618,351 | |
| FE | 68899 | 2-KR | AJT | CIP of 08/399,108 | 04/08/97 | |
| FE | 68899 | 2-PC | MSS | PCT/US96/18731 | Closed | PCT |
| FE | 68899 | 2-EP | AJT | 11/22/96 | | |
| FE | 68899 | 2-IP | MSS | 96941440.8 | 08/64170 | |
| FE | 68899 | 2-KR | AJT | 11/22/96 | | Europe |
| FE | 68899 | 2-PC | MSS | 520565/97 | | |
| FE | 68899 | 2-EP | AJT | 11/22/96 | | Japan |
| FE | 68899 | 2-IP | MSS | 703960/1998 | | |
| FE | 68899 | 2-KR | AJT | 11/22/96 | | South Korea |

I-71955/MSS (46035-828)
1099128

| Reference No. | | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|------|-----------------|---|--|--|----------------------|
| FA | 68899 | 2-TW | AJT | THERMAL PROCESSING APPARATUS AND PROCESS/Koble, Jr.; Dtp; Engdahl; Oliver; Ratiff | 86101168 01/31/97 | NI-094773 06/11/98 | Taiwan |
| A | 68900 | | AJT | METHOD OF LOADING AND UNLOADING A FURNACE/Aldridge; Elloway; Fritz; Goff; Herrera | 06/719,409 04/03/85 | 4,636,140 01/13/87 | |
| A | 68900 | 1 | AJT | SEMICONDUCTOR WAFER BOAT LOADER RELEASABLE MOUNTING/Aldridge; Elloway; Fritz; Goff; Herrera | 06/880,460 06/30/86 Div. of 06/719,409 | 4,721,424 01/26/88 Abandoned Reinstated | |
| A | 68900 | 2 | AJT | SEMICONDUCTOR WAFER FURNACE DOOR/ Aldridge; Elloway; Fritz; Goff; Herrera | 06/880,422 06/30/86 Div. of 06/719,409 | 4,692,115 09/08/87 Abandoned | |
| A | 68900 | 3 | AJT | SEMICONDUCTOR WAFER BOAT LOADER CONTROL SYSTEM | 06/880,423 06/30/86 Div. of 06/719,409 | 4,684,863 08/04/87 Abandoned | |
| A | 68901 | | AJT | GAS SCAVENGER/Taylor | 06/919,736 10/16/86 | 4,711,197 12/08/87 Abandoned | |
| FA | 68901 | CA | AJT | GAS SCAVENGER/Taylor | 545,025 08/21/87 | 1,277,442 12/04/90 Abandoned | Canada |
| FA | 68901 | IP | AJT | GAS SCAVENGER/Taylor | 261507/87 10/16/87 | 2642936 05/02/97 | Japan |
| A | 68902 | | AJT | THERMAL PROCESSING APPARATUS/Kowalaki; Ratiff; Koble; Peck; Yang | 08/827,542 03/28/97 | 6,005,225 12/21/99 | |
| FA | 68902 | KR | AJT | THERMAL PROCESSING APPARATUS/Kowalaki; Ratiff; Koble; Peck; Yang | 10787/1998 03/27/98 | | South Korea |
| FA | 68902 | JP | AJT | THERMAL PROCESSING APPARATUS/Kowalaki; Ratiff; Koble; Peck; Yang | 951866/98 03/25/98 | | Japan |
| FA | 68902 | TW | AJT | THERMAL PROCESSING APPARATUS/Kowalaki; Ratiff; Koble; Peck; Yang | 87104418 03/24/98 | | Taiwan |
| FE | 68902 | EP | AJT | THERMAL PROCESSING APPARATUS/Kowalaki; Ratiff; Koble; Peck; Yang | 98301618.9 03/05/98 | | Europe |
| A | 68902 | 1 | AJT | SEMICONDUCTOR THERMAL PROCESSOR WITH | 09/022,057 | 6,059,567 | |

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| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
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| FA | 68902 | 1-AU | MSS | RECIRCULATING HEATER EXHAUST COOLING SYSTEM/Bolton; Wiseman | 02/10/98 CIP of 08/827,542 | |
| FA | 68902 | 1-CA | AJT MSS | 15511/99 02/08/99 | | Australia |
| FE | 68902 | 1-EP | AJT MSS | 2,261,391 02/08/99 | | Canada |
| FE | 68902 | 1-HK | AJT MSS | 99300910.9 02/09/99 | | Europe |
| FA | 68902 | 1-JP | AJT MSS | 00100999.1 02/18/00 | | Hong Kong |
| FA | 68902 | 1-KR | AJT MSS | 11-072438 02/10/99 | | Japan |
| A | 68903 | | AJT MSS/WEN | 4492/1999 02/09/99 | | South Korea |
| FA | 68903 | AU | AJT MSS | 09/022,056 02/10/98 | 6,101,844 08/15/00 | |
| FA | 68903 | CA | AJT MSS | 15512/99 02/08/99 | 746022 07/25/02 | Australia |
| FA | 68903 | JP | AJT MSS | 2,261,394 02/08/99 | Abandoned | Canada |
| FA | 68903 | KR | AJT MSS | 11-072437 02/10/99 | | Japan |
| FE | 68903 | EP | AJT MSS | 4491/1999 02/09/99 | | South Korea |
| FE | 68903 | HK | AJT MSS | 99300909.1 02/09/99 | | Europe |
| P | 68905 | | AJT MSS | 00100998.2 02/18/00 | Abandoned | Hong Kong |
| A | 68905 | | AJT MSS | 60/096,283 08/12/98 | Closed | |
| P | 68905 | 1 | AJT MSS | 09/573,894 08/12/99 | 6,300,600 10/09/01 | |
| | | | AJT | 60217,321 | Closed | |

1-71985/MSS (463085-828)
1059128

| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|-----------------|-----|----------------------------|---------------------------|----------------------|
| A | 68905 | 1 | MSS | | | |
| | | | AJT | 07/07/00 | | |
| FP | 68905 | 1-PC | MSS | 09/638,113 | 6,462,310 | |
| | | | AJT | 08/11/00 | 10/08/02 | |
| EA | 68905 | 1-CN | MSS | PCT/US00/22202 | Closed | PCT |
| | | | AJT | 08/11/00 | | |
| FA | 68905 | 1-JP | MSS | 00812823.5 | | China |
| | | | MBG | 08/11/00 | | |
| FA | 68905 | 1-KR | AJT | 2001-517110 | | Japan |
| | | | MSS | 08/11/00 | | |
| FA | 68905 | 1-MY | MBG | 2002-7001786 | | South Korea |
| | | | AJT | 08/11/00 | | |
| FA | 68905 | 1-SG | MSS | P1 20003683 | | Malaysia |
| | | | AJT | 08/11/00 | | |
| FA | 68905 | 1-TW | MBG | Unfiled | | Singapore |
| | | | AJT | | | |
| FE | 68905 | 1-EP | MSS | 89116281 | 149415 | Taiwan |
| | | | AJT | 08/11/00 | 05/17/02 | |
| A | 68905 | 2 | MSS | 00957426.0 | | Europe |
| | | | AJT | 08/11/00 | | |
| A | 68905 | 3 | MSS | 09/534,952 | 6,492,621 | |
| | | | AJT | 08/21/01 | 12/10/02 | |
| A | 68905 | 4 | MSS | 10262,215 | | |
| | | | AJT | 09/30/02 | | |
| A | 68905 | 5 | MSS | 10261,963 | | |
| | | | AJT | 09/30/02 | | |
| A | 68906 | | MSS | Unfiled | | |
| | | | AJT | | | |
| A | 68907 | | MSS | 06/529,415 | 4,524,719 | |
| | | | AJT | 09/06/83 | 06/25/85 | |
| | | | AJT | | | |
| | | | AJT | 06/899,923 | 4,720,395 | |
| | | | AJT | | | |

I-71935/MSS (463035-828)
1059128

| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|-----------------|---|---|--------------------------------------|----------------------|
| | | | PROCESS | 08/25/85 | 01/19/88 | |
| A | 68908 | | PULSE WIDTH MODULATED PRESSURE CONTROL SYSTEM FOR CHEMICAL VAPOR DEPOSITION APPARATUS/Johnson; Elliott | 06/845,212 03/27/86 CIP of 06/813,915 | Abandoned 4,728,969 03/01/88 | |
| A | 68909 | | HOT WALL DIFFUSION FURNACE AND METHOD FOR OPERATING THE FURNACE/Yu; Fisk; Emami | 07/181,787 04/15/88 | 4,886,954 12/12/89 | |
| A | 68910 | | METHOD AND APPARATUS FOR REMOVAL OF BY- PRODUCTS OF CHEMICAL VAPOR DEPOSITION FROM OIL FOR VACUUM PUMP/Foster | 06/029,525 04/12/79 | 4,228,004 10/14/80 | |
| A | 68911 | | MASS FLOW CONTROLLER/Doyle | 06/193,876 10/03/80 | 4,658,855 04/21/87 | |
| A | 68912 | | DIFFUSION FURNACE MULTIZONE TEMPERATURE CONTROL/Yu | 06/864,676 05/19/86 | 4,711,989 12/08/87 | |
| A | 68913 | | WAFER BOAT TRANSFER TOOL/Mello | 06/863,963 05/16/86 | 4,728,246 03/01/88 | |
| A | 68914 | | WAFER TRANSFER STAND/Sanders; Taylor | 07/048,868 05/12/87 | Abandoned 4,721,427 01/26/88 | |
| A | 68915 | | TEMPERATURE SENSOR FOR BATCH-TYPE REACTOR/Rodriguez | 09/024,500 02/17/98 | Abandoned Reinstated Abandoned | |
| A | 68916 | | LAYERED BLOCK FLUID DELIVERY SYSTEM/ Nguyen | 09/388,216 09/01/99 | Abandoned | |
| FA | 68916 | TW | LAYERED BLOCK FLUID DELIVERY SYSTEM/Nguyen | 89116370 08/14/00 | 148378 08/21/01 | Taiwan |
| FP | 68916 | PC | LAYERED BLOCK FLUID DELIVERY SYSTEM/Nguyen | US00/21227 08/03/00 | Abandoned | PCT |

I-719935/MSS (463035-828)
1059128

| Reference No. | Title/Inventors | | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-----------------|------|-------------------|--|---|--|
| A | 68916 | 1 | AJT MSS VEJ | MODULAR FLUID DELIVERY SYSTEM/NGUYEN | 09/800,495 03/06/01 CIP of 09/388,216 09/01/99 | |
| FA | 68916 | 1-CN | AJT MSS | MODULAR FLUID DELIVERY APPARATUS/NGUYEN | 02106330.5 03/05/02 | China |
| FA | 68916 | 1-JP | AJT MSS | MODULAR FLUID DELIVERY APPARATUS/NGUYEN | 2002-059114 03/05/02 | Japan |
| FA | 68916 | 1-KR | AJT MSS | MODULAR FLUID DELIVERY APPARATUS/NGUYEN | 2002-0011854 03/06/02 | South Korea |
| FA | 68916 | 1-MY | AJT MSS | MODULAR FLUID DELIVERY APPARATUS/NGUYEN | P120020747 03/01/02 | Malaysia |
| FA | 68916 | 1-SG | AJT MSS | MODULAR FLUID DELIVERY APPARATUS/NGUYEN | 200201201-1 02/27/02 | Singapore |
| FA | 68916 | 1-TW | AJT MSS | MODULAR FLUID DELIVERY APPARATUS/NGUYEN | 91103478 02/26/02 | Taiwan |
| FE | 68916 | 1-EP | AJT MSS | MODULAR FLUID DELIVERY APPARATUS/NGUYEN | 02251573.8 03/06/02 | Europe |
| P | 69013 | | MSS | FLUOROPOLYMER INTERLAYER DIELECTRIC BY CHEMICAL VAPOR DEPOSITION/Rose; Bdehko; Lopata; Mocella | 05/04/01 (filed by Du Pont) | Co-owned with Dupont |
| A | 69013 | | AJT MSS | DEPOSITION OF FLUOROPOLYMER FILMS/Mocella; Rose; Lopata; Pacak; Talley; Young | Unfiled | |
| A | 69173 | | MSS | MODEL BASED TEMPERATURE CONTROL OF BATCH FURNACE/Oh | Unfiled | |
| A | 69174 | | MSS | IN-SITU METHOD AND APPARATUS FOR END POINT DETECTION IN CHEMICAL MECHANICAL POLISHING/Nami; Saks; Oh | 09/628,471 07/31/00 | Co-owned with MIT, all foreign as well |
| P | 69174 | 1 | MSS | IN-SITU SENSING AND ENDPOINT DETECTION IN COPPER CMP/Saks; Lai; Oh | 6,476,921 11/05/02 | |
| A | 69174 | 1 | AJT MSS | IN-SITU METHOD AND APPARATUS FOR END POINT DETECTION IN CHEMICAL MECHANICAL POLISHING/Saks; Lai; Oh | 6,028,931 12/29/00 | |
| | | | | | 10,029,080 12/21/01 | Co-owned with MIT, all foreign as well |

I-71935/MSS (463035-828)
1059128

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|---------------|-------|------|-----------------|---|----------------------------|---------------------------|--|
| FA | 69174 | 1-CN | MSS | IN-SITU METHOD AND APPARATUS FOR END POINT DETECTION | N/A 07/31/01 | | China |
| FA | 69174 | 1-JP | MSS | IN-SITU METHOD AND APPARATUS FOR END POINT DETECTION | 2002-516606 01/31/01 | | Japan |
| FA | 69174 | 1-KR | MSS | IN-SITU METHOD AND APPARATUS FOR END POINT DETECTION | 2003-7001394 01/31/01 | | S. Korea |
| FA | 69174 | 1-MY | AJT MSS | IN-SITU METHOD AND APPARATUS FOR END POINT DETECTION IN CHEMICAL MECHANICAL POLISHING/Name; Sub; Oh | FI 20013602 07/31/01 | | Malaysia |
| FA | 69174 | 1-SG | MSS | IN-SITU METHOD AND APPARATUS FOR END POINT DETECTION | 200300662-4 01/31/01 | | Singapore |
| FA | 69174 | 1-TW | MSS | IN-SITU METHOD AND APPARATUS FOR END POINT DETECTION IN CHEMICAL MECHANICAL POLISHING/Name; Sub; Oh | 90118624 07/31/01 | 158247 10/18/02 | Taiwan |
| FP | 69174 | 1-PC | MSS | IN-SITU METHOD AND APPARATUS FOR END POINT DETECTION IN CHEMICAL MECHANICAL POLISHING/Name; Sub; Oh | PC/US01/24146 07/31/01 | Closed | PCI |
| A | 69175 | | MSS | APPARATUS AND METHOD FOR CHEMICAL MECHANICAL POLISHING OF SUBSTRATES/Melvin; Sub; Oh | 09/628,563 07/31/00 | | Co-owned with MIT, all foreign as well |
| FA | 69175 | MY | MSS | APPARATUS AND METHOD FOR CHEMICAL MECHANICAL POLISHING OF SUBSTRATES/Melvin; Sub; Oh | P20013601 07/30/01 | | Malaysia |
| FA | 69175 | TW | MSS | APPARATUS AND METHOD FOR CHEMICAL MECHANICAL POLISHING OF SUBSTRATES/Melvin; Sub; Oh | 90118623 07/31/01 | | Taiwan |
| P | 69175 | 1 | MSS | APPARATUS AND METHOD FOR CHEMICAL MECHANICAL POLISHING OF SUBSTRATES/Melvin; Sub; Oh | 60259,016 12/29/00 | Closed | |
| | | | | APPARATUS AND METHOD FOR CHEMICAL MECHANICAL POLISHING OF SUBSTRATES/Sub; Melvin; Oh | 60259,016 12/29/00 | | Co-owned with MIT, all foreign as well |
| FA | 69175 | 1-CN | MSS | APPARATUS AND METHOD FOR CHEMICAL MECHANICAL POLISHING | 01815145.0 01/31/01 | | China |

I-71933/MSS (463035-828)
1009128

| Reference No. | | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
|---------------|-------|------|-----------------|--|----------------------------|---------------------------|--|
| FA | 69175 | 1-JP | MSS | APPARATUS AND METHOD FOR CHEMICAL MECHANICAL POLISHING | 2002-515445 01/31/01 | | Japan |
| FA | 69175 | 1-KR | MSS | APPARATUS AND METHOD FOR CHEMICAL MECHANICAL POLISHING | 2003-7001395 01/31/01 | | South Korea |
| FA | 69175 | 1-SG | MSS | APPARATUS AND METHOD FOR CHEMICAL MECHANICAL POLISHING | 2003006678-0 01/31/01 | | Singapore |
| FA | 69175 | 1-EP | MSS | APPARATUS AND METHOD FOR CHEMICAL MECHANICAL POLISHING | 1962336.2 01/31/01 | | Europe |
| EP | 69175 | 1-PC | MSS | APPARATUS AND METHOD FOR CHEMICAL MECHANICAL POLISHING OF SUBSTRATES/Melvin; Sub; Oh | PCT/US01/41513 07/31/01 | | PCT |
| A | 69175 | 2 | MSS | APPARATUS AND METHOD FOR CHEMICAL MECHANICAL POLISHING OF SUBSTRATES/Sub; Melvin; Oh | Closed | | |
| A | 69228 | | MSS | METHOD OF CHEMICAL MECHANICAL POLISHING/Lat; Sub; Oh | 09/628,962 07/31/00 | 6,458,013 10/01/02 | Co-owned with MIT, all foreign as well |
| FA | 69228 | CN | MSS | METHOD OF CHEMICAL MECHANICAL POLISHING/Lat; Sub; Oh | 01815147.7 07/31/01 | | China |
| FA | 69228 | JP | MSS | METHOD OF CHEMICAL MECHANICAL POLISHING/Lat; Sub; Oh | 2002-515446 07/31/01 | | Japan |
| FA | 69228 | KR | MSS | METHOD OF CHEMICAL MECHANICAL POLISHING/Lat; Sub; Oh | 2003-7001400 07/31/01 | | South Korea |
| FA | 69228 | MY | MSS | METHOD OF CHEMICAL MECHANICAL POLISHING/Lat; Sub; Oh | P20013603 07/31/01 | | Malaysia |
| EP | 69228 | PC | MSS | METHOD OF CHEMICAL MECHANICAL POLISHING/Lat; Sub; Oh | PCT/US01/24170 07/31/01 | | PCT |
| FA | 69228 | SG | MSS | METHOD OF CHEMICAL MECHANICAL POLISHING/Lat; Sub; Oh | 200300663-2 07/31/01 | | Singapore |
| FA | 69228 | TW | MSS | METHOD OF CHEMICAL MECHANICAL POLISHING/Lat; Sub; Oh | 90118625 07/31/01 | | Taiwan |
| FE | 69228 | EP | MSS | METHOD OF CHEMICAL MECHANICAL POLISHING/Lat; Sub; Oh | 01957381.5 07/31/01 | | Europe |
| P | 69229 | | MSS | MECHANISMS OF MATERIAL REMOVAL IN THE CHEMICAL MECHANICAL POLISHING PROCESS/ | 60263,813 01/23/01 | Closed | |

I-71935/MSS (463035-828)
1059128

| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
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| | | Lai; Sakai; Chinn | | | | |
| A | 69229 | MSS | | 10/057,477 01/23/02 | | Co-owned with MIT; all foreign as will |
| FP | 69229 | PC | | PCT/US02/02254 01/23/02 | | PCT |
| A | 69274 | MSS | | 06/864,077 05/16/86 | 4,770,590 09/13/88 | |
| RE | 69274 | MSS | | 90/006,018 05/21/01 | Re-examination of Patent No. 4,770,590 | |
| FA | 69274 | DE | MSS | P3715601.2 05/09/87 | 315787 07/06/00 | Germany |
| FA | 69274 | DE-1 | MSS | P3745134.0 01/24/96 | 03/04/99 | Germany |
| FA | 69274 | FR | MSS | 8706851 05/13/87 | 8706851 08/21/92 | France |
| FA | 69274 | FR-1 | MSS | 8716024 11/19/87 | 8716024 08/21/92 | France |
| FA | 69274 | IT | MSS | 47930A/87 05/14/87 | 1206283 04/14/89 | Italy |
| FA | 69274 | JP | MSS | 62-117197 05/15/87 | 2681055 08/08/97 | Japan |
| FA | 69274 | GB | MSS | 8711230 05/13/87 | 2190345 08/15/90 | Great Britain |
| FA | 69274 | GB-1 | MSS | 8922730.0 05/13/87 | 2223470 08/15/90 | Great Britain |

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1059128

| Reference No. | | Title/Inventors | | Serial No./ Filing Date | Patent No./ Issue Date | Foreign Countries |
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| A | 69404 | | MSS | NON-CONTACT CMP MACHINE | | |
| P | 69447 | | MSS | | CLOSED PER CLIENT | |
| A | 69447 | | MSS | 60/274,532 03/08/01 | | |
| FP | 69447 | PC | MSS | 10/095,974 03/08/02 | | |
| FA | 69447 | CN | MSS | PCT/US02/07034 03/08/02 | | PCT |
| FA | 69447 | JP | MSS | 02800595.3 03/08/02 | | China |
| FA | 69447 | KR | MSS | 2002/572612 03/08/02 | | Japan |
| FA | 69447 | MY | MSS | 2002-7014904 03/08/02 | | South Korea |
| FA | 69447 | SG | MSS | PI20022469 06/28/02 | | Malaysia |
| FA | 69447 | TW | MSS | 200206968-0 03/08/02 | | Singapore |
| FB | 69447 | EP | MSS | 91114419 06/25/02 | | Taiwan |
| P | 69448 | | MSS | 027079649 03/08/02 | | Europe |
| A | 69448 | | MSS | 60/266,926 02/06/01 | Closed | |
| FA | 69448 | CN | MSS | 10/068,127 02/06/02 | | |
| FA | 69448 | JP | MSS | 021080852 02/06/02 | | China |
| FA | 69448 | KR | MSS | 2002-069336 02/06/02 | | Japan |
| FA | 69448 | MY | MSS | 2002-6778 02/06/02 | | South Korea |
| | | | | PI20020366 02/24/02 | | Malaysia |

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| FA | 69448 | TW | MSS | INERTIAL TEMPERATURE CONTROL/Stamer | 91101797 02/01/02 | 173549 07/07/03 | Taiwan |
| FE | 69448 | EP | MSS | INERTIAL TEMPERATURE CONTROL/Stamer | 02250814.7 02/06/02 | | Europe |
| A | 69477 | | MSS | NON-CONTACT CMP MACHINE/Sub | | Closed | |
| P | 69829 | | MSS | APPARATUS FOR THE PREFERENTIAL DEPOSITION OF TEOS+O3 BASED SIOX THIN FILMS ON SILICON SURFACES RELATIVE TO SILICON-NITRIDE SURFACES/Mayer; Ingles; Murphy; Mattoon; Kurita | 60/335,494 11/01/01 | Closed | |
| A | 69829 | | MSS MDV | APPARATUS FOR THE PREFERENTIAL DEPOSITION OF TEOS+O3 BASED SIOX THIN FILMS ON SILICON SURFACE RELATIVE TO SILICON-NITRIDE SURFACES/Mayer; Ingles; Murphy; Mattoon; Kurita | 10/285,966 11/01/02 | | |
| FA | 69829 | CN | MSS MDV MBG | APPARATUS FOR THE PREFERENTIAL DEPOSITION OF TEOS+O3 BASED SIOX THIN FILMS ON SILICON SURFACES RELATIVE TO SILICON-NITRIDE SURFACES/Mayer; Ingles; Murphy; Mattoon; Kurita | 11/01/02 | | China |
| FA | 69829 | JP | MSS MDV MBG | APPARATUS FOR THE PREFERENTIAL DEPOSITION OF TEOS+O3 BASED SIOX THIN FILMS ON SILICON SURFACES RELATIVE TO SILICON-NITRIDE SURFACES/Mayer; Ingles; Murphy; Mattoon; Kurita | 2002-320226 11/01/02 | | Japan |
| FA | 69829 | KR | MSS MDV MBG | APPARATUS FOR THE PREFERENTIAL DEPOSITION OF TEOS+O3 BASED SIOX THIN FILMS ON SILICON SURFACES RELATIVE TO SILICON-NITRIDE SURFACES/Mayer; Ingles; Murphy; Mattoon; Kurita | 10/31/02 | | South Korea |
| FA | 69829 | MY | MSS MDV MBG | APPARATUS FOR THE PREFERENTIAL DEPOSITION OF TEOS+O3 BASED SIOX THIN FILMS ON SILICON SURFACES RELATIVE TO SILICON-NITRIDE SURFACES/Mayer; Ingles; Murphy; Mattoon; Kurita | PI20024020 10/28/02 | | Malaysia |

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| FA | 69829 | TW | MSS MDV MBG | APPARATUS FOR THE PREFERENTIAL DEPOSITION OF TEOS+O ₃ BASED SIOX THIN FILMS ON SILICON SURFACES RELATIVE TO SILICON-NITRIDE SURFACES/Mayer, Inglet, Murphy; Mathson; Kudva | 91125270 10/25/02 | | Taiwan |
| FE | 69829 | EP | MSS MDV MBG | APPARATUS FOR THE PREFERENTIAL DEPOSITION OF TEOS+O ₃ BASED SIOX THIN FILMS ON SILICON SURFACES RELATIVE TO SILICON-NITRIDE SURFACES/Mayer, Inglet, Murphy; Mathson; Kudva | 02257608.6 01/01/02 | | Europe |
| P | 70028 | | MSS | MULTILAYER HIGH DIELECTRIC CONSTANT OXIDE FILMS AND METHOD OF MAKING/Senzaki | 60/264,428 01/26/01 | Closed | |
| A | 70028 | | MSS | MULTILAYER HIGH- κ GATE OXIDE THIN FILMS/Senzaki | 10/056,625 01/25/02 | | |
| P | 70292 | | AJT MSS | FLUOROPOLYMER INTERLAYER DIELECTRIC BY CHEMICAL VAPOR DEPOSITION/ Mocella; Fetting, Trest, Brichko, Lopata, Rose | 60/288,633 05/04/01 | Closed | Application is co- owned with DuPont |
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| P | 70380 | | MSS MDV | HIGH FLOW RATE BUBBLER WITH A LIQUID PHASE EVAPORATOR/Torkman | 60/337,566 11/30/01 | Closed | Application is co- owned with DuPont |
| A | 70380 | | MSS MDV | HIGH FLOW RATE BUBBLER WITH A LIQUID PHASE EVAPORATOR/Torkman | | | To be filed by DuPont counsel |
| FA | 70380 | MY | MSS | HIGH FLOW RATE BUBBLER SYSTEM AND METHOD; Torkman | 11/27/02 | | |
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| FA | 70380 | PC | MSS | HIGH FLOW RATE BUBBLER SYSTEM AND METHOD; Torkman | US02/38178 11/27/03 | | PCT |
| P | 70381 | | MSS WEN | APPARATUS AND METHOD FOR INSULATING A SEAL IN A PROCESS CHAMBER/Draper; Robinson; Lopes | 60/313,719 08/20/01 | Closed | |
| A | 70381 | | MSS WEN | APPARATUS & METHOD FOR INSULATING A SEAL IN A PROCESS CHAMBER/Draper; Robinson; Lopes | 10/224,687 08/20/02 | | |
| FA | 70381 | CN | MSS | APPARATUS & METHOD FOR INSULATING A SEAL IN A PROCESS CHAMBER/Draper; Robinson; Lopes | 02143456.5 08/19/02 | | China |
| FA | 70381 | JP | MSS | APPARATUS & METHOD FOR INSULATING A SEAL IN A PROCESS CHAMBER/Draper; Robinson; Lopes | 2002-280066 08/20/02 | | Japan |
| FA | 70381 | KR | MSS | APPARATUS & METHOD FOR INSULATING A SEAL IN A PROCESS CHAMBER/Draper; Robinson; Lopes | 2002-0049154 08/20/02 | | South Korea |
| FA | 70381 | MY | MSS | APPARATUS & METHOD FOR INSULATING A SEAL IN A PROCESS CHAMBER/Draper; Robinson; Lopes | P120023060 08/19/02 | | Malaysia |
| FA | 70381 | SG | MSS | APPARATUS & METHOD FOR INSULATING A SEAL IN A PROCESS CHAMBER/Draper; Robinson; Lopes | 200203046-6 08/20/02 | | Singapore |
| FA | 70381 | TW | AT MSS MBG | SYSTEM AND METHOD FOR DEPOSITING INORGANIC/ORGANIC DIELECTRIC FILMS/Draper; Robinson; Lopes | 91118697 08/19/02 | | Taiwan |
| FB | 70381 | EP | MSS | APPARATUS & METHOD FOR INSULATING A SEAL IN A PROCESS CHAMBER/Draper; Robinson; Lopes | 02255775.5 08/20/02 | | Europe |
| A | 70466 | | MSS | CHEMICAL VAPOR DEPOSITION SYSTEM FOR DEPOSITING FLUOROPOLYMER FILMS/Lopata | Closed | | |
| P | 70524 | | MSS | MODULAR INJECTOR AND EXHAUST ASSEMBLY/ DeDontley; Mathiesen; Kurita | 60/305,406 07/13/01 | Closed | |
| A | 70524 | | MSS | MODULAR INJECTOR AND EXHAUST ASSEMBLY/ DeDontley; Mathiesen; Kurita | 10/194,639 07/12/02 | | |
| FA | 70524 | CN | MSS TIH MBG | MODULAR INJECTOR AND EXHAUST ASSEMBLY/ DeDontley; Mathiesen; Kurita | 02141805.5 07/15/02 | | China |

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| FA | 70524 | KR | MSS TJH MBG | MODULAR INJECTOR/DeDontley; Matthiesen; Kurita | 2002-0040964 07/13/02 | | South Korea |
| FA | 70524 | MY | MSS TJH MBG | MODULAR INJECTOR/DeDontley; Matthiesen; Kurita | P20022636 07/11/02 | | Malaysia |
| FA | 70524 | SG | MSS TJH MBG | MODULAR INJECTOR/DeDontley; Matthiesen; Kurita | 200204228-1 07/12/02 | | Singapore |
| FA | 70524 | TW | MSS TJH MBG | MODULAR INJECTOR/DeDontley; Matthiesen; Kurita | 91115568 07/12/02 | | Taiwan |
| FE | 70524 | EP | MSS TJH | MODULAR INJECTOR/DeDontley; Matthiesen; Kurita | 02254963.8 07/15/02 | | Europe |
| A | 70824 | | MSS | HEATING SYSTEM AND METHOD FOR HEATING AN ATMOSPHERIC REACTION/Breedan; Seidemann; Koeester | Prepared and Prosecuted by Infineon counsel | This patent appln. is co-owned with Infineon | [related opened matth: Pat. Appl. # MY- 0P120021354; TW-091107447; PC- PCT/EP02/04060] |
| P | 70859 | | MSS | DEPOSITION OF LOW STRESS GERMANIUM AND BORON DOPED SILICA FILMS FOR OPTICAL WAVEGUIDES/Mogard | 60/310,026 08/03/01 | Closed | |
| A | 70859 | | MSS | OXIDE STRUCTURE AND METHOD OF FORMING THE OXIDE STRUCTURE/Mogard | 10/210,978 08/02/02 | | China |
| FA | 70859 | CN | MSS | OXIDE STRUCTURE USABLE FOR OPTICAL WAVEGUIDE AND METHOD OF FORMING THE OXIDE STRUCTURE/Mogard | 08/08/02 | | Japan |
| FA | 70859 | JP | MSS | OXIDE STRUCTURE USABLE FOR OPTICAL WAVEGUIDE AND METHOD OF FORMING THE OXIDE STRUCTURE/Mogard | 2002-262112 08/05/02 | | South Korea |
| FA | 70859 | KR | MSS | OXIDE STRUCTURE USABLE FOR OPTICAL | 2002-0045980 | | |

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| FB 70859 | EP | MSS | 91117477 08/02/02 | | Taiwan |
| | | MDV MBG | 02255429.9 08/02/02 | | Europe |
| A 70888 | | MSS TIH | Closed | | |
| P 70893 | | MSS | 60/314,762 08/24/01 | Closed | |
| A 70893 | | MSS | 10226,459 08/23/02 | | |
| FA 70893 | MY | MSS MBG | PT0023124 08/23/02 | | Malaysia |
| FA 70893 | TW | MSS MBG | 91119174 08/23/02 | | Taiwan |
| FP 70893 | PC | MSS | PCT/US02/27376 08/26/02 | | PCT |
| P 70896 | | MSS | 60/314,760 08/24/01 | Closed | |
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| FA | 70896 | MY | MSS MBG | CONTROL SYSTEM AND METHOD/Bartholomew; Bailey; Park; Yuh | | |
| FA | 70896 | TW | MSS MBG | ATMOSPHERIC PRESSURE WAFER PROCESSING REACTOR HAVING AN INTERNAL PRESSURE CONTROL SYSTEM AND METHOD/Bartholomew; Bailey; Park; Yuh | P120023123 08/23/02 | Malaysia |
| FP | 70896 | PC | MSS | ATMOSPHERIC PRESSURE WAFER PROCESSING REACTOR HAVING AN INTERNAL PRESSURE CONTROL SYSTEM AND METHOD/Bartholomew; Bailey; Park; Yuh | 91119175 08/23/02 | Taiwan |
| P | 71033 | | MSS | ATMOSPHERIC PRESSURE WAFER PROCESSING REACTOR HAVING AN INTERNAL PRESSURE CONTROL SYSTEM AND METHOD/Bartholomew; Bailey; Park; Yuh | PCT/US02/27372 08/26/02 | PCT |
| A | 71033 | | MSS | APPARATUS AND PROCESS FOR IMPROVED THIN DIELECTRIC FILMS/Senzaki; Herring; Helms; Osborne | 60/332,397 11/16/01 | Closed |
| FA | 71033 | CN | MSS JW | SYSTEM AND METHOD FOR IMPROVED THIN DIELECTRIC FILMS/Senzaki; Herring; Helms; Osborne | 10/106,677 03/25/02 | |
| FA | 71033 | JP | MSS JW | SYSTEM AND METHOD FOR IMPROVED THIN DIELECTRIC FILMS/Senzaki; Herring; Helms; Osborne | 02157580.0 11/15/02 | China |
| FA | 71033 | KR | MSS JW | SYSTEM AND METHOD FOR IMPROVED THIN DIELECTRIC FILMS/Senzaki; Herring; Helms; Osborne | 2002-333209 11/18/02 | Japan |
| FA | 71033 | MY | MSS JW | SYSTEM AND METHOD FOR IMPROVED THIN DIELECTRIC FILMS/Senzaki; Herring; Helms; Osborne | 2002-0071019 11/15/02 | South Korea |
| FA | 71033 | SG | MSS JW | SYSTEM AND METHOD FOR IMPROVED THIN DIELECTRIC FILMS/Senzaki; Herring; Helms; Osborne | EI 20024197 11/11/02 | Malaysia |
| FA | 71033 | TW | MSS | SYSTEM AND METHOD FOR IMPROVED THIN DIELECTRIC FILMS/Senzaki; Herring; Helms; Osborne | 200206876-5 11/14/02 | Singapore |
| FB | 71033 | EP | MSS JW | SYSTEM AND METHOD FOR IMPROVED THIN DIELECTRIC FILMS/Senzaki; Herring; Helms; Osborne | 91133057 11/11/02 | Taiwan |
| | | | | SYSTEM AND METHOD FOR IMPROVED THIN DIELECTRIC FILMS/Senzaki; Herring; Helms; Osborne | 02257838.9 11/13/02 | Europe |

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| A | 71033 | 1 | MSS | SYSTEM AND METHOD FOR IMPROVED THIN DIELECTRIC FILMS/Senzaki; Herring; Hobbs; Osborne | Closed | |
| A | 71050 | | MSS | OPTIMIZATION OF CHEMICAL REACTION RATE COEFFICIENTS BY AUTOMATED ITERATIVE COMPUTER SIMULATIONS AND COEFFICIENT VARIATION USING A DESIGNED-EXPERIMENT APPROACH/Chaffman; Bailey | Closed | |
| P | 71181 | | MSS | HEATED VACUUM SUPPORT APPARATUS Tom Kane, Jeff Bailey, Sam Kunita, Kris Veeck | 60/333,447 11/26/01 | Closed |
| A | 71181 | | MSS | HEATED VACUUM SUPPORT APPARATUS/Kane; Bailey; Kunita; Veeck | 10/303,035 11/22/02 | |
| FA | 71181 | MY | MSS | HEATED VACUUM SUPPORT APPARATUS/Kane; Bailey; Kunita; Veeck | PI 20024390 11/25/02 | Malaysia |
| FA | 71181 | TW | MSS | HEATED VACUUM SUPPORT APPARATUS/Kane; Bailey; Kunita; Veeck | 91134187 11/25/02 | Taiwan |
| FP | 71181 | PC | MSS | HEATED VACUUM SUPPORT APPARATUS/Kane; Bailey; Kunita; Veeck | PCT/US02/38106 11/25/02 | PCT |
| P | 71197 | | MSS | IN-SITU THERMAL CHAMBER CLEANING/Herring; Slason; Senzaki | 60/379,381 05/08/02 | Closed |
| A | 71197 | | MSS | SINGLE WAFER THERMAL PROCESSING SYSTEM AND IN-SITU CLEANING METHOD/Herring; Slason; Senzaki | 10/318,664 12/12/02 | |
| FA | 71197 | MY | MSS | SINGLE WAFER THERMAL PROCESSING SYSTEM AND IN-SITU CLEANING METHOD/Herring; Slason; Senzaki | PI 20031610 04/29/03 | Malaysia |
| FA | 71197 | TW | MSS | SINGLE WAFER THERMAL PROCESSING SYSTEM AND IN-SITU CLEANING METHOD/Herring; Slason; Senzaki | 92110202 04/30/03 | Taiwan |
| FA | 71197 | PC | MSS | SINGLE WAFER THERMAL PROCESSING SYSTEM AND IN-SITU CLEANING METHOD/Herring; Slason; Senzaki | N/A 04/25/03 | PCT |
| A | 71355 | | MSS | SEMICONDUCTOR WAFER CARRIER TRANSPORT APPARATUS/Hoyt III; Sanders; Goldman; Mello | 06/863,961 05/16/86 | 4,722,659 02/02/88 |

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| A | 71356 | MSS | SEMICONDUCTOR WAFER CARRIER INPUT/ OUTPUT DRAWER/Hoyt III; Goldman; Mello | 06/863,960 05/16/86 | Abandoned 4,934,767 06/19/90 | |
| P | 71514 | MSS | METHOD OF DEPOSITING AN OXIDE FILM BY CHEMICAL VAPOR DEPOSITION TO ACHIEVE COMPLETE GAP-FILL SUB-MICRON STRUCTURES/ Park; Bartholomew; Yuh | 60/382,780 05/21/02 | Abandoned Closed | |
| A | 71514 | MSS | METHOD OF DEPOSITING AN OXIDE FILM BY CHEMICAL VAPOR DEPOSITION/ Park; Bartholomew; Yuh | 10/442,423 05/20/03 | | |
| FA | 71514 | MY | METHOD OF DEPOSITING AN OXIDE FILM BY CHEMICAL VAPOR DEPOSITION/ Park; Bartholomew; Yuh | FI 20031855 05/20/03 | | Malaysia |
| FA | 71514 | TW | METHOD OF DEPOSITING AN OXIDE FILM BY CHEMICAL VAPOR DEPOSITION/ Park; Bartholomew; Yuh | 05/20/03 | | Taiwan |
| FP | 71514 | PC | METHOD OF DEPOSITING AN OXIDE FILM BY CHEMICAL VAPOR DEPOSITION/ Park; Bartholomew; Yuh | 05/20/03 | | PCI |
| P | 71564 | MSS | SYSTEM AND METHOD FOR HYDROGEN RICH SELECTIVE OXIDATION/Herring; Porter; Dodwell; Nazareno; Radtiff; Chatterji | 60/387,185 06/06/02 | Closed | |
| A | 71564 | MSS | SYSTEM AND METHOD FOR HYDROGEN RICH SELECTIVE OXIDATION/Herring; Porter; Dodwell; Nazareno; Radtiff; Chatterji | 10/456,850 06/06/03 | | |
| FA | 71564 | MY | SYSTEM AND METHOD FOR HYDROGEN RICH SELECTIVE OXIDATION/Herring; Porter; Dodwell; Nazareno; Radtiff; Chatterji | 06/06/03 | | Malaysia |
| FA | 71564 | TW | SYSTEM AND METHOD FOR HYDROGEN RICH SELECTIVE OXIDATION/Herring; Porter; Dodwell; Nazareno; Radtiff; Chatterji | 06/06/03 | | Taiwan |

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| FP | 71564 | PC | MSS | SYSTEM AND METHOD FOR HYDROGEN RICH SELECTIVE OXIDATION/Herring; Porter; Doddwall; Nazareno; Rediff; Chatterji | 06/06/03 | | PCT |
| P | 71581 | | MSS | OZONE OXIDATION OF SILICON SUBSTRATES FOR FORMATION OF AN INTERFACIAL LAYER FOR HIGH-k GATE STACKS/Senzaki; Herring | 60/399,463 07/29/02 | Closed | |
| A | 71581 | | MSS | OZONE OXIDATION OF SILICON SUBSTRATES FOR FORMATION OF AN INTERFACIAL LAYER FOR HIGH-k GATE STACKS/Senzaki; Herring | | | Unfiled |
| FP | 71581 | PC | MSS | OZONE OXIDATION OF SILICON SUBSTRATES FOR FORMATION OF AN INTERFACIAL LAYER FOR HIGH-k GATE STACKS/Senzaki; Herring | | | |
| FA | 71581 | TW | MSS | OZONE OXIDATION OF SILICON SUBSTRATES FOR FORMATION OF AN INTERFACIAL LAYER FOR HIGH-k GATE STACKS/Senzaki; Herring | 07/29/03 | | PCT |
| P | 71582 | | MSS WEN | OPTIMIZED MINI-BATCH CONFIGURABLE VERTICAL CHAMBER/Qu; Wildman; Collins; Kowalski; Edwards; DuBois; Nam; Torkaman; Ma; Starnes | 60/396,536 07/15/02 | Closed | Taiwan |
| P | 71582 | 1 | MSS WEN | OPTIMIZED MINI-BATCH CONFIGURABLE VERTICAL CHAMBER/Qu; Wildman; Collins; Kowalski; Edwards; DuBois; Nam; Torkaman; Ma; Starnes | 60/428,526 11/22/02 | Closed | |
| P | 71606 | | MSS | SYSTEM AND METHOD FOR ATOMIC LAYER DEPOSITION AND REMOVAL/Kaptein; Sang-In Lee | 60/391,011 06/23/02 | Closed | |
| A | 71606 | | MSS TIE | METHOD AND SYSTEM FOR ATOMIC LAYER DEPOSITION/Kaptein; Sang-In Lee | | | |
| FA | 71606 | TW | MSS | SYSTEM AND METHOD FOR ATOMIC LAYER DEPOSITION AND REMOVAL/Kaptein; Sang-In Lee | 06/23/03 | | Taiwan |
| FP | 71606 | PC | MSS | SYSTEM AND METHOD FOR ATOMIC LAYER DEPOSITION AND REMOVAL/Kaptein; Sang-In Lee | PCT/US03/19982 06/23/03 | | PCT |
| P | 71606 | 1 | MSS | METHOD AND SYSTEM FOR PHOTO-ASSISTED ATOMIC LAYER DEPOSITION AND REMOVAL/ Hobbs, Jr.; Kaptein; Sang-In Lee; Senzaki | 60/391,012 06/23/02 | Closed | |

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| EA | 71606 | 1-TW | MSS | METHOD AND SYSTEM FOR PHOTO-ASSISTED ATOMIC LAYER DEPOSITION AND REMOVAL/ Helma, Jr.; Kaping; Sang-In Lee; Senzaki | 06/23/03 | | Taiwan |
| FP | 71606 | 1-PC | MSS | METHOD AND SYSTEM FOR PHOTO-ASSISTED ATOMIC LAYER DEPOSITION AND REMOVAL/ Helma, Jr.; Kaping; Sang-In Lee; Senzaki | 06/23/03 | | PCT |
| P | 71622 | | MSS | MOLECULAR LAYER DEPOSITION OF THIN FILMS WITH MIXED COMPONENTS/Senzaki; Sang-In Lee | 60/397,029 07/18/02 | Closed | |
| A | 71622 | | MSS | MOLECULAR LAYER DEPOSITION OF THIN FILMS WITH MIXED COMPONENTS/Senzaki; Sang-In Lee | | | |
| EA | 71622 | TW | MSS | MOLECULAR LAYER DEPOSITION OF THIN FILMS WITH MIXED COMPONENTS/Senzaki; Sang-In Lee | 07/16/03 | | Taiwan |
| FP | 71622 | PC | MSS | MOLECULAR LAYER DEPOSITION OF THIN FILMS WITH MIXED COMPONENTS/Senzaki; Sang-In Lee | 92119581 07/17/03 | | PCT |
| P | 71637 | | MSS | APNEXT MACH 2 WAFER HEATING & TRANSLATE SYSTEM & DESIGN/DeDontney | 60/396,735 07/19/02 | Closed | |
| P | 71638 | | MSS | ATOMIC LAYER DEPOSITION OF HIGH-k DIELECTRIC FILMS/Senzaki; Sang-In Lee | 60/396,723 07/19/02 | Closed | |
| A | 71638 | | MSS | ATOMIC LAYER DEPOSITION OF HIGH-k DIELECTRIC FILMS/Senzaki; Sang-In Lee | | | |
| EA | 71638 | TW | MSS | ATOMIC LAYER DEPOSITION OF HIGH-k DIELECTRIC FILMS/Senzaki; Sang-In Lee | 07/17/03 | | Taiwan |
| FP | 71638 | PC | MSS | ATOMIC LAYER DEPOSITION OF HIGH-k DIELECTRIC FILMS/Senzaki; Sang-In Lee | 07/19/03 | | PCT |
| P | 71639 | | MSS | LOW TEMPERATURE OZONE ANNEAL OF GATE AND CAPACITOR DIELECTRICS/Senzaki; Sing-In Lee | 60/396,742 07/19/02 | Closed | |
| EA | 71639 | TW | MSS | LOW TEMPERATURE OZONE ANNEAL OF GATE AND CAPACITOR DIELECTRICS/Senzaki; Sing-In Lee | 07/17/03 | | Taiwan |
| FP | 71639 | PCT | MSS | LOW TEMPERATURE OZONE ANNEAL OF GATE AND CAPACITOR DIELECTRICS/Senzaki; Sing-In Lee | 07/16/03 | | PCT |

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| P | 71640 | MSS | LOW TEMPERATURE DIELECTRIC DEPOSITION USING AMINOSILANE AND OZONE/Senzaki | 60/396,746 07/19/02 | Closed | |
| FA | 71640 | TW | LOW TEMPERATURE DIELECTRIC DEPOSITION USING AMINOSILANE AND OZONE/Senzaki | | | |
| FP | 71640 | PC | LOW TEMPERATURE DIELECTRIC DEPOSITION USING AMINOSILANE AND OZONE/Senzaki | 07/17/03 | | Taiwan |
| P | 71641 | MSS | MOCVD & ATOMIC LAYER DEPOSITION OF HF-O- N & H ₂ Si-O-N FOR GATE AND CAPACITOR DIELECTRICS/Senzaki; Sang-In Lee | 07/15/03 | | PCT |
| A | 71641 | MSS | MOCVD & ATOMIC LAYER DEPOSITION OF HF-O- N & H ₂ Si-O-N FOR GATE AND CAPACITOR DIELECTRICS/Senzaki; Sang-In Lee | 60/396,744 07/19/02 | Closed | |
| FA | 71641 | TW | MOCVD & ATOMIC LAYER DEPOSITION OF HF-O- N & H ₂ Si-O-N FOR GATE AND CAPACITOR DIELECTRICS/Senzaki; Sang-In Lee | | | |
| FP | 71641 | PC | MOCVD & ATOMIC LAYER DEPOSITION OF HF-O- N & H ₂ Si-O-N FOR GATE AND CAPACITOR DIELECTRICS/Senzaki; Sang-In Lee | 92119583 07/17/03 | | Taiwan |
| P | 71642 | MSS | MOCVD & ATOMIC LAYER DEPOSITION OF HF-O- N & H ₂ Si-O-N FOR GATE AND CAPACITOR DIELECTRICS/Senzaki; Sang-In Lee | 07/16/03 | | PCT |
| P | 71643 | MSS | VACUUM UV ASSISTED ATOMIC LAYER DEPOSITION/Senzaki; Sang-In Lee | 60/396,743 07/19/02 | Closed, combined with 71606-1 | |
| FA | 71643 | TW | STREAM OXIDATION FOR THE FORMATION OF THIN GATE AND CAPACITOR DIELECTRIC WITH IMPROVED ELECTRICAL PROPERTIES/Senzaki; Brichlor; Herring | 60/396,733 07/19/02 | Closed | |
| FP | 71643 | PC | STREAM OXIDATION FOR THE FORMATION OF THIN GATE AND CAPACITOR DIELECTRIC WITH IMPROVED ELECTRICAL PROPERTIES/Senzaki; Brichlor; Herring | 07/17/073 | | Taiwan |
| | 71643 | MSS | STREAM OXIDATION FOR THE FORMATION OF THIN GATE AND CAPACITOR DIELECTRIC WITH IMPROVED ELECTRICAL PROPERTIES/Senzaki; Brichlor; Herring | 07/17/03 | | PCT |

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| P | 71644 | MSS | IN-SITU FORMATION OF MIM CAPACITORS/Sang-In Lee | 60/396,734 07/19/02 | Closed | |
| EA | 71644 | TW | IN-SITU FORMATION OF MIM CAPACITORS/Sang-In Lee | | | |
| FP | 71644 | PC | IN-SITU FORMATION OF MIM CAPACITORS/Sang-In Lee | 07/17/03 | | Taiwan |
| P | 71645 | MSS | ATOMIC LAYER DEPOSITION FOR CAPACITOR APPLICATIONS/Sang-In Lee | 07/17/03 | | PCT |
| A | 71645 | MSS | ATOMIC LAYER DEPOSITION FOR CAPACITOR APPLICATIONS/Sang-In Lee | 60/396,745 07/19/02 | Closed, combined with 71638 | |
| P | 71653 | MSS | METHOD OF MAKING METAL CAPS FOR SEMICONDUCTOR DEVICES/Kaplin | Closed, combined with 71638 | | |
| A | 71653 | MSS | METHOD OF MAKING METAL CAPS FOR SEMICONDUCTOR DEVICES/Kaplin | 60/397,031 07/18/02 | Closed | |
| P | 71720 | MSS | METHOD OF MAKING METAL CAPS FOR SEMICONDUCTOR DEVICES/Kaplin | N/A | | |
| A | 71720 | MSS | ATOMIC LAYER DEPOSITION OF HIGH-K METAL OXIDES FOR GATE AND CAPACITOR DIELECTRICS/Sang-In Lee; S.K. Lee; Shin; Senzaki | 60/404,372 08/18/02 | Closed | |
| EA | 71720 | TW | ATOMIC LAYER DEPOSITION OF HIGH-K METAL OXIDES FOR GATE AND CAPACITOR DIELECTRICS/Sang-In Lee; S.K. Lee; Shin; Senzaki | | | |
| FP | 71720 | PC | ATOMIC LAYER DEPOSITION OF HIGH-K METAL OXIDES FOR GATE AND CAPACITOR DIELECTRICS/Sang-In Lee; S.K. Lee; Shin; Senzaki | 08/14/03 | | Taiwan |
| P | 71721 | MSS | ATOMIC LAYER DEPOSITION OF HIGH-K METAL OXIDES FOR GATE AND CAPACITOR DIELECTRICS/Sang-In Lee; S.K. Lee; Shin; Senzaki | 08/18/03 | | PCT |
| | | | ATOMIC LAYER DEPOSITION OF METAL SILICATES FOR HIGH-K GATE AND CAPACITOR DIELECTRICS/Sang-In Lee; S.K. Lee; Shin; Senzaki | 60/404,371 08/18/02 | Closed | |

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| A | 71721 | MSS | ATOMIC LAYER DEPOSITION OF METAL SILICATES FOR HIGH-K GATE AND CAPACITOR DIELECTRICS/Sang-In Lee; S.K. Lee; Shin; Senzaki | | | |
| EA | 71721 | TW | ATOMIC LAYER DEPOSITION OF METAL SILICATES FOR HIGH-K GATE AND CAPACITOR DIELECTRICS/Sang-In Lee; S.K. Lee; Shin; Senzaki | 08/14/03 | | Taiwan |
| EP | 71721 | PC | ATOMIC LAYER DEPOSITION OF METAL SILICATES FOR HIGH-K GATE AND CAPACITOR DIELECTRICS/Sang-In Lee; S.K. Lee; Shin; Senzaki | 08/18/03 | | PCT |
| P | 71722 | MSS | LOW TEMPERATURE DEPOSITION OF SILICON OXIDES AND SILICON OXYNITRIDE/Sang-In Lee; S.K. Lee; Shin; Senzaki | 60/404,363 08/18/02 | Closed | |
| A | 71722 | MSS | LOW TEMPERATURE DEPOSITION OF SILICON OXIDES AND SILICON OXYNITRIDE/Sang-In Lee; S.K. Lee; Shin; Senzaki | | | |
| EA | 71722 | TW | LOW TEMPERATURE DEPOSITION OF SILICON OXIDES AND SILICON OXYNITRIDE/Sang-In Lee; S.K. Lee; Shin; Senzaki | 08/14/03 | | Taiwan |
| EP | 71722 | PC | LOW TEMPERATURE DEPOSITION OF SILICON OXIDES AND SILICON OXYNITRIDE/Sang-In Lee; S.K. Lee; Shin; Senzaki | 08/18/03 | | PCT |
| P | 71730 | MSS | LOW TEMPERATURE DEPOSITION OF SILICON BASED THIN FILMS BY SINGLE WAFER HOT- WALL RAPID THERMAL CHEMICAL VAPOR DEPOSITION (RTCVD)/Senzaki; Baralli; Teasdale; | 60/408,709 09/05/02 | Closed | |
| A | 71730 | MSS | LOW TEMPERATURE DEPOSITION OF SILICON BASED THIN FILMS BY SINGLE WAFER HOT- WALL RAPID THERMAL CHEMICAL VAPOR DEPOSITION (RTCVD)/Senzaki; Baralli; Teasdale; | 09/05/03 | | |
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| A | 71731 | MSS | SEQUENTIAL TWO-STEP ATOMIC LAYER DEPOSITION OF COPPER SEED LAYER/Senzaki | | | Client Ref. # D- 7006 |
| A | 71732 | MSS | TWO-STEP SEQUENTIAL GROWTH OF HIGH-K GATE DIELECTRICS BY ATOMIC LAYER DEPOSITION/Senzaki | | | Client Ref. # D- 7005 |
| A | 71733 | MSS TJH | ANNEAL PROCESS FOR SILICON NITRIDE DIELECTRIC THIN FILMS/Senzaki; Brichko | | | Client Ref. D-7007 |
| A | 71748 | MSS WEN | THERMAL PROCESSING SYSTEM AND CONFIGURABLE VERTICAL CHAMBER/DuBois; Nann | | | |
| FA | 71748 | TW | THERMAL PROCESSING SYSTEM AND CONFIGURABLE VERTICAL CHAMBER/DuBois; Nann; Wildman; Qui; Kowalski | 07/10/03 | | Taiwan |
| EP | 71748 | PC | THERMAL PROCESSING SYSTEM AND CONFIGURABLE VERTICAL CHAMBER/DuBois; Nann; Wildman; Qui; Kowalski | 07/10/03 | | PCT |
| A | 71749 | MSS TJH | PEDESTAL THERMAL SHIELD/Wildman; Qui | Closed, combined with 71748 | | |
| A | 71750 | MSS TJH | THERMAL PROCESSING APPARATUS AND METHOD OF BACKFILLING A CHAMBER CLEANING/Torkman | | | |
| FA | 71750 | TW | THERMAL PROCESSING APPARATUS AND METHOD OF BACKFILLING A CHAMBER CLEANING/Torkman | 07/10/03 | | Taiwan |
| EP | 71750 | CT | THERMAL PROCESSING APPARATUS AND METHOD OF BACKFILLING A CHAMBER CLEANING/Torkman | 07/10/03 | | PCT |
| A | 71751 | MSS TJH | VACUUM ASSEMBLY WITH MULTI-STAGE VALVE SEQUENCE/Qui | | | |

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| FA | 71751 | TW | MSS | VACUUM ASSEMBLY WITH MULTI-STAGE VALVE SEQUENCE/Qui | 07/10/03 | | Taiwan |
| FP | 71751 | PC | MSS | VACUUM ASSEMBLY WITH MULTI-STAGE VALVE SEQUENCE/Qui | 07/10/03 | | PCT |
| A | 71752 | | MSS WEN | CYCLONIC COOLING SYSTEM AND METHOD/Qui; Collins | | | |
| FA | 71752 | TW | MSS | CYCLONIC COOLING SYSTEM AND METHOD/Qui; Collins | 07/10/03 | | Taiwan |
| FP | 71752 | PC | MSS | CYCLONIC COOLING SYSTEM AND METHOD/Qui; Collins | 07/10/03 | | PCT |
| A | 71753 | | MSS WEN | COOLING SYSTEM AND METHOD/Qui; Collins | Closed, combined with 71752 | | |
| A | 71754 | | MSS | FEED FORWARD TEMPERATURE CONTROLLER/Ma | Closed | | |
| A | 71755 | | MSS KRG | ALIGNMENT APPARATUS AND METHOD OF ALIGNING A WAFER/Ma | on hold | | |
| A | 71756 | | MSS | COMMUNICATION PROTOCOL AND METHOD OF IMPROVED ROBOT THROUGHPUT/Ma | | | |
| A | 71757 | | MSS | DISTRIBUTED SINGLE WIRE NETWORKING ELEVATOR CONTROL SYSTEM AND METHOD/Ma | | | |
| FA | 71757 | TW | MSS | SERVOMOTOR CONTROL SYSTEM & METHOD IN A SEMICONDUCTOR MANUFACTURING ENVIRONMENT; John Ma | 07/10/03 | | Taiwan |
| FP | 71757 | PC | MSS | SERVOMOTOR CONTROL SYSTEM & METHOD IN A SEMICONDUCTOR MANUFACTURING ENVIRONMENT; John Ma | 07/10/03 | | PCT |
| A | 71758 | | MSS KRG | LOAD PORT; Jeffrey E. Kowalecki | | | |
| FA | 71758 | TW | MSS | LOAD PORT APPARATUS; Jeffrey E. Kowalecki | 07/15/03 | | Taiwan |

I-71935/MSS (463085-826)
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| FP | 71758 | PC | MSS | LOAD PORT APPARATUS; Jeffrey E. Kowalski | 07/15/03 | | PCT |
| A | 71759 | | MSS | THERMAL PROCESSING CHAMBER ENVIRONMENTAL CONTROL SYSTEM AND METHOD; Alan Stanner | | | |
| EA | 71759 | TW | MSS | CONTROL OF A GASEOUS ENVIRONMENT IN A WAFER LOADING CHAMBER; Alan Stanner | 07/15/03 | | Taiwan |
| FP | 71759 | PC | MSS | CONTROL OF A GASEOUS ENVIRONMENT IN A WAFER LOADING CHAMBER; Alan Stanner | 07/15/03 | | PCT |
| A | 71768 | | MSS WEN | METHOD AND SYSTEM FOR ISOTHERMAL HEATING OF WAFERS; Jeffrey Kowalski | Closed, combined with 71748 | | |
| A | 71795 | | MSS | HEATER ELEMENT SELECTABLE FOR VARIABLE TEMPERATURE PROCESSING/Qu | | | |
| EA | 71795 | TW | MSS | VARIABLE HEATER ELEMENT FOR LOW TO HIGH TEMPERATURE RANGES/Qu | 07/10/03 | | Taiwan |
| FP | 71795 | PC | MSS | VARIABLE HEATER ELEMENT FOR LOW TO HIGH TEMPERATURE RANGES/Qu | 07/10/03 | | PCT |
| A | 71796 | | MSS | T-RAIL SUPPORT/DaBois | | | |
| EA | 71796 | TW | MSS | METHOD & APPARATUS FOR SUPPORTING SEMICONDUCTOR WAFERS/DaBois | 07/10/93 | | Taiwan |
| FP | 71796 | PC | MSS | METHOD & APPARATUS FOR SUPPORTING SEMICONDUCTOR WAFERS/DaBois | 07/10/03 | | PCT |
| A | 71797 | | MSS | FEED FORWARD CONTROL SYSTEM AND METHOD/Tockman; Radloff (This case may be related to A-71754) | | | |
| A | 71798 | | MSS | SYSTEM ARCHITECTURE AND METHOD FOR SEMICONDUCTOR FABRICATION/Hahn; Witten | | | |

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| P | 71824 | MSS TJH | REMOTE PLASMA NITRIDATION OF HIGH-K GATE DIELECTRICS/Senzaki; Bercaw; Chafman; Higuchi; Lopata | 60/424,891 11/08/02 | | |
| A | 71824 | MSS | REMOTE PLASMA NITRIDATION OF HIGH-K GATE DIELECTRICS/Senzaki; Bercaw; Chafman; Higuchi; Lopata | | | |
| A | 71834 | MSS TJH | METHOD OF ATOMIC LAYER REMOVAL OR HERACHING/Sang-In Lee | Closed, combined with 71606 | | |
| P | 72081 | MSS | TRANSPORT SYSTEM HAVING SHARDED LOAD- LOCK FRONT-END ASSEMBLY FOR TRANSFER OF MEDIA IN A CONTROLLED ENVIRONMENT | 60/443,969 01/31/03 | | |
| P | 72138 | MSS | ELECTRODE STRUCTURE AND METHOD OF FABRICATING AN ELECTRODE HAVING LOW TEMPERATURE OXIDE FILM; S.I. Lee, Y. Senzaki | | Client Ref. No. - D-7031 | |
| P | 72218 | MSS | METHOD OF FABRICATING MULTI-COMPONENT FILMS; Y. Senzaki, S.G. Park | 60/464,458 04/21/03 | Client Ref. No. - D-2419 | |
| P | 72314 | MSS | REACTOR WITH GAS DELIVERY MANIFOLD; DeDonahue, New | 60/473,079 05/30/03 | Client Ref. No. D-2493 | |
| A | 72332 | MSS | IN-SITE CLEANING OF COPPER DETECTION CHAMBER & PARTS | | | |
| A | 72333 | MSS | METHOD OF REDUCING CONTACT RESISTANCE OF COPPER INTERCONNECT | | | |
| A | 72344 | MSS | BATCH FURNACE WAFER RADIAL DELTA TEMPERATURE CONTROL USING A BOTTOM AND TOP HEATER | | | |
| A | 72345 | MSS | SEMICONDUCTOR VERTICAL FURNACE HALO RING CONCEPT; D. DuBois, C. Porter, M. Mognard | | | |
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